

|                |               |
|----------------|---------------|
| Incident ID    | NRM2019551541 |
| 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: Todd Wells Title: Environmental Specialist  
Signature: Todd Wells Date: 8/11/21  
email: Todd\_Wells@eogresources.com Telephone: (432) 686-3613

**OCD Only**

Received by: Chad Hensley Date: 09/02/2021

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: Chad Hensley Date: 09/02/2021  
Printed Name: Chad Hensley Title: Environmental Specialist Advanced

## SITE INFORMATION

### Report Type: Closure Report - NRM2019551541

#### General Site Information:

|                             |                  |         |       |             |  |  |
|-----------------------------|------------------|---------|-------|-------------|--|--|
| Site:                       | Caballo Riser #1 |         |       |             |  |  |
| Company:                    | EOG Resources    |         |       |             |  |  |
| Section, Township and Range | Unit C           | Sec. 22 | T 25S | R 33E       |  |  |
| Lease Number:               |                  |         |       |             |  |  |
| County:                     | Lea County       |         |       |             |  |  |
| GPS:                        | 32.121379        |         |       | -103.563113 |  |  |

#### Release Data:

|                          |                              |
|--------------------------|------------------------------|
| Date Released:           | 1/28/2020                    |
| Type Release:            | Reuse Water                  |
| Source of Contamination: | Failed valve on booster pump |
| Fluid Released:          | 1000 bbl Reuse Water         |
| Fluids Recovered:        | 200 bbl Reuse Water          |

#### Official Communication:

|               |                                                                              |  |                                                                              |
|---------------|------------------------------------------------------------------------------|--|------------------------------------------------------------------------------|
| Name:         | Todd Wells                                                                   |  | Brittany Long                                                                |
| Company:      | EOG Resources                                                                |  | Tetra Tech                                                                   |
| Address:      | 5509 Champions Dr.                                                           |  | 901 W. Wall St.                                                              |
|               |                                                                              |  | Ste 100                                                                      |
| City:         | Midland, Texas, 79706                                                        |  | Midland, Texas, 79701                                                        |
| Phone number: | (432) 686-3613                                                               |  | (432) 682-4559                                                               |
| Fax:          |                                                                              |  |                                                                              |
| Email:        | <a href="mailto:Todd_Wells@eogresources.com">Todd_Wells@eogresources.com</a> |  | <a href="mailto:Brittany.Long@TetraTech.com">Brittany.Long@TetraTech.com</a> |

#### Site Characterization

|                       |                       |
|-----------------------|-----------------------|
| Depth to Groundwater: | 204.36' Below Surface |
| Karst Potential:      | Low                   |

#### Recommended Remedial Action Levels (RRALs)

| Benzene  | Total BTEX | TPH (GRO+DRO) | TPH (GRO+DRO+MRO) | Chlorides    |
|----------|------------|---------------|-------------------|--------------|
| 10 mg/kg | 50 mg/kg   | 1,000 mg/kg   | 2,500 mg/kg       | 10,000 mg/kg |

**TETRA TECH**

August 11, 2021

Environmental Specialist  
Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico 87505

**Re: Closure Report for the EOG Resources, Caballo Riser #1, Unit C, Section 22, Township 25 South, Range 33 East, Lea County, New Mexico.**

Oil Conservation Division:

Tetra Tech, Inc. (Tetra Tech) was contacted by EOG Resources (EOG) to assess and remediate a release that occurred at the EOG Resources, Caballo Riser #1, Unit C, Section 22, Township 25 South, Range 33 East, Lea County, New Mexico (Site). The site coordinates are 32.121379°, -103.563113°. The site location is shown on Figures 1 and 2.

## **Background**

According to the State of New Mexico C-141 Initial Report the release was discovered on January 28, 2020 and released approximately 1,000 barrels of reuse water, due to a leaking reuse water line. Approximately 200 barrels of the reuse water was recovered. The release occurred along into a pipeline right-of-way (ROW) and impacted areas measuring approximately 416' x 200'. The C-141 form is included in Appendix A.

## **Site Characterization**

A site characterization was performed for the site and no watercourses, lakebeds, sinkholes, playa lakes, residences, schools, hospitals, institutions, churches, springs, private domestic water wells, wetlands, incorporated municipal boundaries, subsurface mines, or floodplains are located within the specified distances. Additionally, the site is in a low karst potential area. The nearest well is listed in the USGS National Water Information Database website in Section 20, approximately 1.67 miles Southwest of the site, and has a reported depth to groundwater of 204.36 feet below ground surface. Site characterization data is included in Appendix B.

Tetra Tech

901 W Wall Street, Suite 100, Midland, TX 79701

Tel 432.682.4559 Fax 432.682.3946 [www.tetrattech.com](http://www.tetrattech.com)



## TETRA TECH

### Depth to Water Determination

On August 20, 2020, Scarborough Drilling, Inc was onsite to drill a groundwater determination borehole to 55' below ground surface and within a ½ mile radius of the location. The borehole was left open for 72 hours and checked for the presence of groundwater. No water was detected at 55' below surface. The borehole coordinates are 32.120658, -103.563616. The driller log and borehole figure is shown in Appendix B.

### **Regulatory**

A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, updated August 14, 2018. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the site characterization, the proposed RRAL for TPH is 1,000 mg/kg (GRO + DRO) and 2,500 mg/kg (GRO + DRO + MRO). Additionally, based on the site characterization, the proposed RRAL for chlorides is 10,000 mg/kg.

### **Soil Assessment Activities**

#### Auger Holes

On July 20, 2020, Tetra Tech installed nine (9) Auger Holes (AH-1 through AH-9) at total depths ranging from surface to 3.5' below surface, to vertically delineate the impacted soil. Additionally, thirteen (13) horizontal samples (H-1 through H-13) were collected. Select samples were submitted to the laboratory to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The sample results are summarized in Table 1. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C.

Referring to Table 1, none of the samples analyzed showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. However, chloride concentrations were detected above RRALs. Auger Holes (AH-3, AH-5, AH-6, and AH-7) reported chloride concentrations and were not vertically delineated, with concentration highs of 4,160 mg/kg, 2,370 mg/kg, 2,480 mg/kg, and 2,160 mg/kg, respectively, at depths of 2.0'-2.5' below surface. The remaining auger holes did not show any chloride concentrations above the 600 mg/kg surficial threshold. Additionally, Horizontal (H-6) reported a chloride concentration of 885 mg/kg, this area was delineated during remediation activities.

#### Trenches

Due to not reaching vertical delineation in Auger Holes (AH-3, AH-5, AH-6, and AH-7), Tetra Tech was onsite on August 12, 2020, to install four (4) Trenches (T-1 through T-4), corresponding respectively with each auger hole to reach vertical delineation.

Referring to Table 1, none of the samples analyzed showed benzene, total BTEX, or TPH concentrations above the laboratory reporting limits. However, chloride concentrations were



**TETRA TECH**

detected above RRALs. Trenches (T-1 through T-4) all showed vertical delineation at 5.0' below surface, reporting chloride concentration highs of 5,990 mg/kg, 7,020 mg/kg, 3,700 mg/kg, and 3,070 mg/kg, respectively, at depths ranging from surface to 4.0' below surface.

### **Remediation and Reclamation Activities**

Based on the results of the site assessment, Tetra Tech personnel were onsite in November of 2020, to supervise the remediation and reclamation activities as well as to collect confirmation samples. The impacted areas were excavated to a total depth ranging from 4.5' - 5.0' below surface, as shown on Figure 4 and Table 2.

Five-point composite confirmation bottom hole and sidewall samples were collected every 200 square feet. A total of 94 bottom hole samples (Bottom Hole-1 through Bottom Hole-94) and 49 sidewall samples (Sidewall-1 through Sidewall-49) were collected to ensure proper removal of the impacted soils. The samples were submitted to the laboratory to be analyzed for TPH method 8015 modified, BTEX method 8021B, and Chloride by EPA Method 300.0. The sampling results are summarized in Table 2. Copies of laboratory analysis and chain-of-custody documentation are included in Appendix C. The excavation depths and sample locations are shown in Figure 4.

Referring to Table 2, all final confirmation samples collected showed benzene, total BTEX, and TPH concentrations below the laboratory reporting limits. All final samples, were collected at depths 4.5'-5.0' below surface and showed chloride concentrations below the 10,000 mg/kg threshold. Additionally, all horizontal samples reported chloride concentrations below the 600 mg/kg threshold.

Approximately 3,973 cubic yards of material was excavated and transported offsite for proper disposal. The areas were then backfilled with clean material to surface grade.

### **Conclusion**

Based on the laboratory results and remediation activities performed, EOG requests closure of this spill issue. The final C-141 is enclosed in Appendix A. If you have any questions or comments concerning the assessment or remediation activities for this site, please call at (432) 682-4559.

Respectfully submitted,  
TETRA TECH

A handwritten signature in blue ink, appearing to read 'Brittany Long'.

Brittany Long,  
Project Manager

A handwritten signature in blue ink, appearing to read 'Clair Gonzales'.

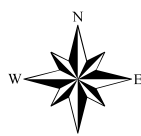
Clair Gonzales, P.G.  
Senior Project Manager

cc: James Kennedy – EOG  
Todd Wells - EOG

## Figures



SITE LOCATION



0 10,416.5 20,833

Approximate Scale in Feet



STATE LOCATOR MAP

## OVERVIEW MAP

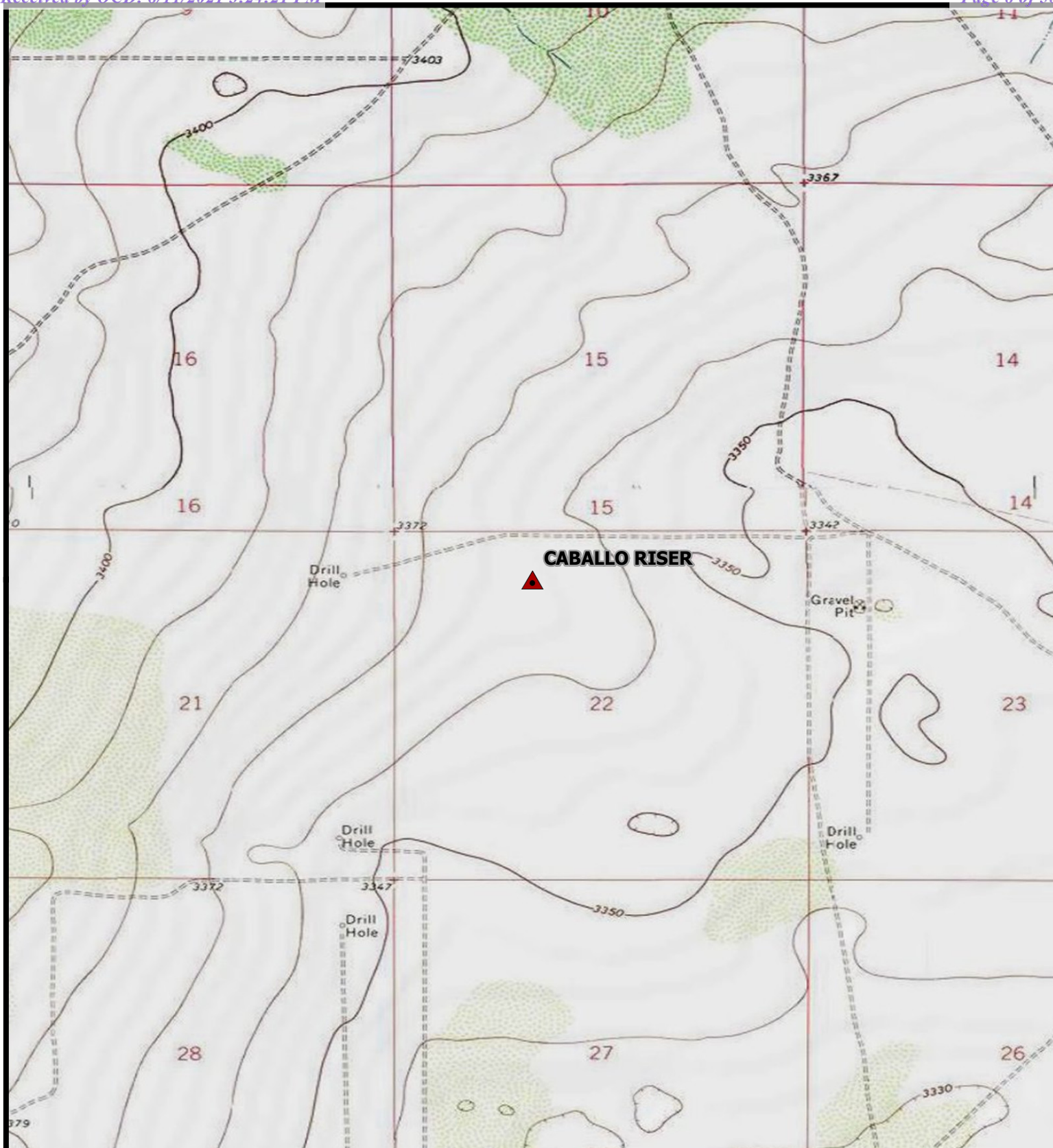
## RISER #1

Property Located at coordinates 32.121379°,-103.563113°  
LEA COUNTY, NEW MEXICO

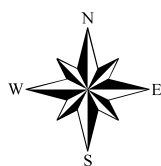


Project #: 212C-MD-02256  
Date: 07/28/2020  
Drawn By: MLM

FIGURE  
1



SITE LOCATION



0 1,000 2,000  
Approximate Scale in Feet

## TOPOGRAPHIC MAP

RISER #1

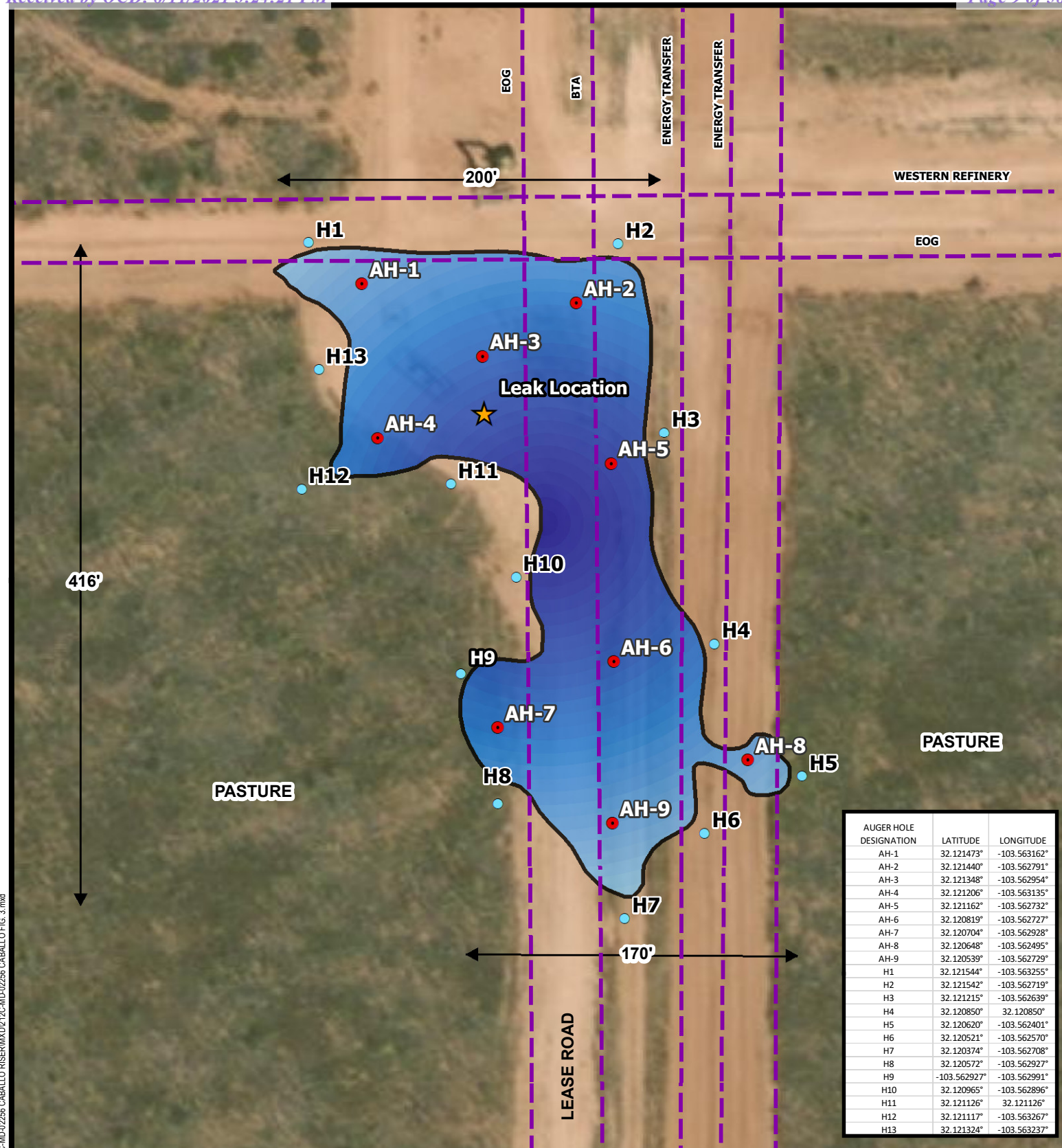
Property Located at coordinates 32.121379°,-103.563113°  
LEA COUNTY, NEW MEXICO



Project #: 212C-MD-02256  
Date: 07/28/2020  
Drawn By: MLM

FIGURE  
2





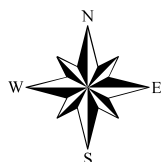
★ LEAK LOCATION

● AUGER HOLE SAMPLE LOCATIONS

● HORIZONTAL SAMPLE LOCATIONS

— BURIED PIPELINE

■ SPILL



0 41.665 83.33  
Approximate Scale in Feet

### SPILL ASSESSMENT MAP

#### RISER #1

Property Located at coordinates 32.121379°,-103.563113°  
LEA COUNTY, NEW MEXICO



Project #: 212C-MD-02256  
Date: 07/28/2020  
Drawn By: MLM

**FIGURE**  
**3**

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community(10/29/2019)

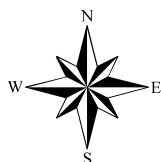


**BH** BOTTOMHOLE SAMPLE LOCATION

● SIDEWALL DESIGNATIONS

— BURIED PIPELINE

4.5-5.0' EXCAVATED DEPTH AREA



0 20 40  
Approximate Scale in Feet

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community(10/29/2019)

## EXCAVATION AREA AND DEPTH MAP RISER #1

Property Located at coordinates 32.121379°,-103.563113°  
LEA COUNTY, NEW MEXICO



Project #: 212C-MD-02256  
Date: 07/28/2020  
Drawn By: MLM

FIGURE  
4

# Tables



**Table 1**  
**EOG**  
**Riser #1 Release**  
**Lea County, New Mexico**

| Sample ID       | Sample Date | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------------|-------------|-------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|                 |             |                   | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| <b>AH-1</b>     | 7/20/2020   | 0-1               | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 13.9             |
|                 | "           | 1-1.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 9.64             |
|                 | "           | 2-2.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 7.26             |
|                 | "           | 3-3.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 5.90             |
| <b>AH-2</b>     | 7/20/2020   | 0-1               | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 11.3             |
|                 | "           | 1-1.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | <5.00            |
|                 | "           | 2-2.5             | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | <5.03            |
|                 | "           | 3-3.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 5.96             |
| <b>AH-3</b>     | 7/20/2020   | 0-1               |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 473              |
|                 | "           | 1-1.5             |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | <b>1,270</b>     |
|                 | "           | 2-2.5             |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | <b>4,160</b>     |
| <b>Trench-1</b> | 8/12/2020   | 0-1               |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | <b>698</b>       |
|                 | "           | 1                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>906</b>       |
|                 | "           | 2                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>1,890</b>     |
|                 | "           | 3                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>5,990</b>     |
|                 | "           | 4                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>1,910</b>     |
|                 | "           | 5                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 77.5             |
|                 | "           | 6                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 12.9             |
| <b>AH-4</b>     | 7/20/2020   | 0-1               | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | <5.02            |
|                 | "           | 1-1.5             | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 6.74             |
|                 | "           | 2-2.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 16.9             |
|                 | "           | 3-3.5             | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 38.5             |

**Table 1**  
**EOG**  
**Riser #1 Release**  
**Lea County, New Mexico**

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|           |             |                   | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| AH-5      | 7/20/2020   | 0-1               |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 78.0             |
|           | "           | 1-1.5             |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 275              |
|           | "           | 2-2.5             |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | <b>2,370</b>     |
| Trench-2  | 8/12/2020   | 0-1               |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 96.4             |
|           | "           | 1                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 75.3             |
|           | "           | 2                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 389              |
|           | "           | 3                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>7,020</b>     |
|           | "           | 4                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>6,070</b>     |
|           | "           | 5                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>4,650</b>     |
|           | "           | 6                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>1,640</b>     |
|           | "           | 7                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 396              |
|           | "           | 8                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 42.3             |
| AH-6      | 7/20/2020   | 0-1               |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 59.9             |
|           | "           | 1-1.5             |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 226              |
|           | "           | 2-2.5             |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | <b>2,480</b>     |
| Trench-3  | 8/12/2020   | 0-1               |             | X       | <49.8       | <49.8 | <49.8 | <49.8 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 73.2             |
|           | "           | 1                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 171              |
|           | "           | 2                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>873</b>       |
|           | "           | 3                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>3,700</b>     |
|           | "           | 4                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>3,650</b>     |
|           | "           | 5                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>2,680</b>     |
|           | "           | 6                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>2,670</b>     |
|           | "           | 7                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | <b>2,570</b>     |
|           | "           | 8                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 517              |
|           | "           | 9                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 586              |

**Table 1**  
**EOG**  
**Riser #1 Release**  
**Lea County, New Mexico**

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|           |             |                   | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| AH-7      | 7/20/2020   | 0-1               |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 31.1             |
|           | "           | 1-1.5             |             | X       | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 115              |
|           | "           | 2-2.5             |             | X       | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,160            |
| Trench-4  | 8/12/2020   | 0-1               |             | X       | <50.2       | <50.2 | <50.2 | <50.2 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 77.8             |
|           | "           | 1                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 98.5             |
|           | "           | 2                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 1,080            |
|           | "           | 3                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 2,630            |
|           | "           | 4                 |             | X       | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 3,070            |
|           | "           | 5                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 3,890            |
|           | "           | 6                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 3,120            |
|           | "           | 7                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 838              |
|           | "           | 8                 | X           |         | -           | -     | -     | -     | -               | -               | -                    | -              | -                  | 400              |
| AH-8      | 7/20/2020   | 0-1               | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 27.1             |
|           | "           | 1-1.5             | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 29.2             |
|           | "           | 2-2.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 166              |
| AH-9      | 7/20/2020   | 0-1               | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 20.5             |
|           | "           | 1-1.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 18.5             |
|           | "           | 2-2.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 122              |
| H-1       | 7/20/2020   | 0-0.5             | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 23.3             |
| H-2       | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 9.94             |
| H-3       | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 23.5             |
| H-4       | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 36.8             |
| H-5       | 7/20/2020   | 0-0.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 9.74             |
| H-6       | 7/20/2020   | 0-0.5             |             | X       | <49.8       | <49.8 | <49.8 | <49.8 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 885              |
| H-7       | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 490              |

Table 1  
EOG  
Riser #1 Release  
Lea County, New Mexico

| Sample ID | Sample Date | Sample Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-----------|-------------|-------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|           |             |                   | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| H-8       | 7/20/2020   | 0-0.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | <4.99            |
| H-9       | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 103              |
| H-10      | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | <4.96            |
| H-11      | 7/20/2020   | 0-0.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | <4.98            |
| H-12      | 7/20/2020   | 0-0.5             | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | <5.04            |
| H-13      | 7/20/2020   | 0-0.5             | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | <4.97            |

( - )

Not Analyzed



Excavated



Table 2  
EOG Resources  
Riser #1 Release  
Lea County, New Mexico

| Sample ID      | Sample Date | Excavtion Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|----------------|-------------|----------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|                |             |                      | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| Bottom Hole-1  | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 8,370            |
| Bottom Hole-2  | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 8,000            |
| Bottom Hole-3  | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 6,160            |
| Bottom Hole-4  | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 8,600            |
| Bottom Hole-5  | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 6,290            |
| Bottom Hole-6  | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 4,180            |
| Bottom Hole-7  | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 3,200            |
| Bottom Hole-8  | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,610            |
| Bottom Hole-9  | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,150            |
| Bottom Hole-10 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,100            |
| Bottom Hole-11 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 3,810            |
| Bottom Hole-12 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 4,340            |
| Bottom Hole-13 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,460            |
| Bottom Hole-14 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,890            |
| Bottom Hole-15 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,780            |
| Bottom Hole-16 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,920            |
| Bottom Hole-17 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,040            |
| Bottom Hole-18 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,820            |
| Bottom Hole-19 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,840            |
| Bottom Hole-20 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 2,780            |
| Bottom Hole-21 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 3,300            |
| Bottom Hole-22 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 3,020            |
| Bottom Hole-23 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 3,630            |
| Bottom Hole-24 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 2,880            |
| Bottom Hole-25 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 5,080            |
| Bottom Hole-26 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 3,350            |
| Bottom Hole-27 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 2,000            |
| Bottom Hole-28 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 1,970            |
| Bottom Hole-29 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 3,700            |
| Bottom Hole-30 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 4,000            |
| Bottom Hole-31 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 2,150            |
| Bottom Hole-32 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,270            |
| Bottom Hole-33 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 3,840            |
| Bottom Hole-34 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 4,810            |

Table 2  
EOG Resources  
Riser #1 Release  
Lea County, New Mexico

| Sample ID      | Sample Date | Excavtion Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|----------------|-------------|----------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|                |             |                      | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| Bottom Hole-35 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,310            |
| Bottom Hole-36 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,800            |
| Bottom Hole-37 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 5,830            |
| Bottom Hole-38 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 4,570            |
| Bottom Hole-39 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 2,450            |
| Bottom Hole-40 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 3,950            |
| Bottom Hole-41 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,720            |
| Bottom Hole-42 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,500            |
| Bottom Hole-43 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,360            |
| Bottom Hole-44 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 135              |
| Bottom Hole-45 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 5,960            |
| Bottom Hole-46 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,860            |
| Bottom Hole-47 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,420            |
| Bottom Hole-48 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,840            |
| Bottom Hole-49 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,750            |
| Bottom Hole-50 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,210            |
| Bottom Hole-51 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,030            |
| Bottom Hole-52 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,020            |
| Bottom Hole-53 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,330            |
| Bottom Hole-54 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,740            |
| Bottom Hole-55 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,750            |
| Bottom Hole-56 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,240            |
| Bottom Hole-57 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,670            |
| Bottom Hole-58 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,010            |
| Bottom Hole-59 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 3,510            |
| Bottom Hole-60 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 4,490            |
| Bottom Hole-61 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 4,350            |
| Bottom Hole-62 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.00198       | <0.00198           | 208              |
| Bottom Hole-63 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 158              |
| Bottom Hole-64 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 179              |
| Bottom Hole-65 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 183              |
| Bottom Hole-66 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 193              |
| Bottom Hole-67 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 2,220            |
| Bottom Hole-68 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 2,010            |
| Bottom Hole-69 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 2,210            |



Table 2  
EOG Resources  
Riser #1 Release  
Lea County, New Mexico

| Sample ID      | Sample Date | Excavtion Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|----------------|-------------|----------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|                |             |                      | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| Bottom Hole-70 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 2,250            |
| Bottom Hole-71 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 1,800            |
| Bottom Hole-72 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 1,110            |
| Bottom Hole-73 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 958              |
| Bottom Hole-74 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 1,030            |
| Bottom Hole-75 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.00200       | <0.00200           | 966              |
| Bottom Hole-76 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 1,090            |
| Bottom Hole-77 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 975              |
| Bottom Hole-78 | 11/10/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.00202       | <0.00202           | 1,030            |
| Bottom Hole-79 | 11/10/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00201        | <0.00201        | <0.00201             | <0.00201       | <0.00201           | 1,040            |
| Bottom Hole-80 | 11/10/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.00199       | <0.00199           | 1,040            |
| Bottom Hole-81 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.36             |
| Bottom Hole-82 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.96             |
| Bottom Hole-83 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.74             |
| Bottom Hole-84 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 8.62             |
| Bottom Hole-85 | 11/16/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.56             |
| Bottom Hole-86 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.16             |
| Bottom Hole-87 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.45             |
| Bottom Hole-88 | 11/16/2020  | 4.5-5                | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 8.05             |
| Bottom Hole-89 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.33             |
| Bottom Hole-90 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 6.92             |
| Bottom Hole-91 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.58             |
| Bottom Hole-92 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 8.16             |
| Bottom Hole-93 | 11/16/2020  | 4.5-5                | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 8.19             |
| Bottom Hole-94 | 11/16/2020  | 4.5-5                | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 8.28             |
| Sidewall-1     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 235              |
| Sidewall-2     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 10.4             |
| Sidewall-3     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 6.71             |
| Sidewall-4     | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 6.53             |
| Sidewall-5     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.79             |
| Sidewall-6     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.56             |
| Sidewall-7     | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 71.6             |
| Sidewall-8     | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 208              |
| Sidewall-9     | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.34             |

Table 2  
EOG Resources  
Riser #1 Release  
Lea County, New Mexico

| Sample ID   | Sample Date | Excavtion Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-------------|-------------|----------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|             |             |                      | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| Sidewall-10 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 8.23             |
| Sidewall-11 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 8.02             |
| Sidewall-12 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.54             |
| Sidewall-13 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 31.5             |
| Sidewall-14 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 347              |
| Sidewall-15 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 13.6             |
| Sidewall-16 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 9.00             |
| Sidewall-17 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 7.33             |
| Sidewall-18 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 8.06             |
| Sidewall-19 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 6.51             |
| Sidewall-20 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.86             |
| Sidewall-21 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 8.57             |
| Sidewall-22 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 376              |
| Sidewall-23 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 13.9             |
| Sidewall-24 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.36             |
| Sidewall-25 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 6.96             |
| Sidewall-26 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 14.0             |
| Sidewall-27 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.21             |
| Sidewall-28 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 40.8             |
| Sidewall-29 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 104              |
| Sidewall-30 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 13.4             |
| Sidewall-31 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 206              |
| Sidewall-32 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 455              |
| Sidewall-33 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 55.5             |
| Sidewall-34 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 56.1             |
| Sidewall-35 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 12.4             |
| Sidewall-36 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.01             |
| Sidewall-37 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 117              |
| Sidewall-38 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 56.6             |
| Sidewall-39 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 9.70             |
| Sidewall-40 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 6.82             |
| Sidewall-41 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 8.91             |
| Sidewall-42 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 6.60             |
| Sidewall-43 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.67             |



Table 2  
EOG Resources  
Riser #1 Release  
Lea County, New Mexico

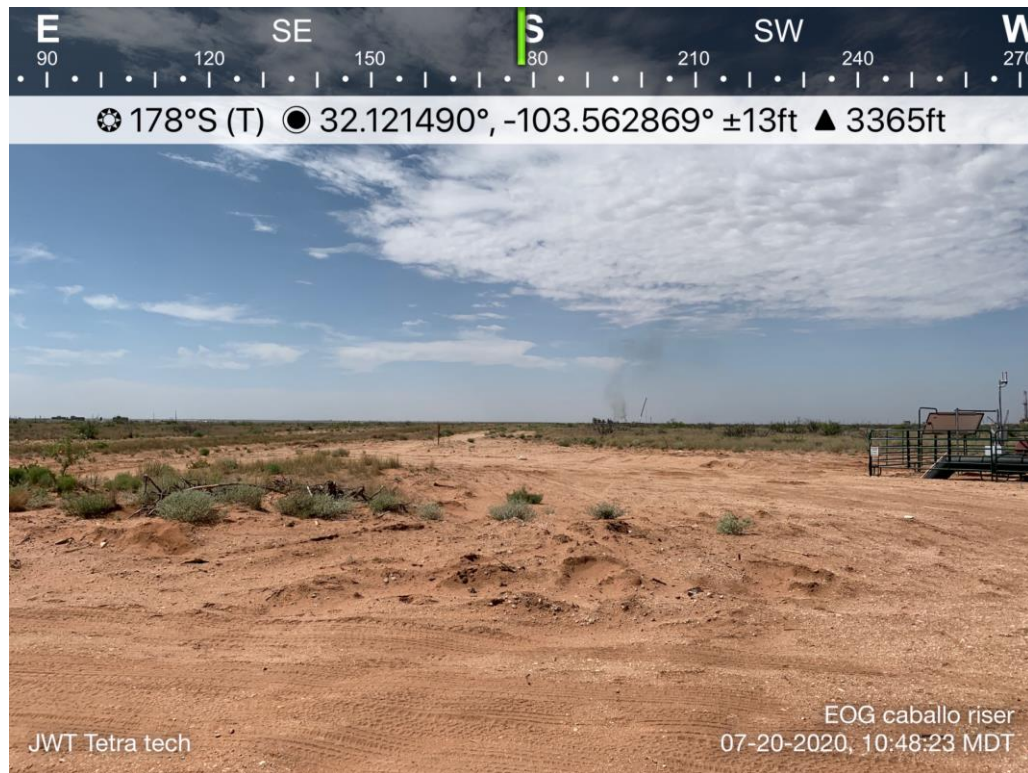
| Sample ID   | Sample Date | Excavtion Depth (ft) | Soil Status |         | TPH (mg/kg) |       |       |       | Benzene (mg/kg) | Toluene (mg/kg) | Ethlybenzene (mg/kg) | Xylene (mg/kg) | Total BTEX (mg/kg) | Chloride (mg/kg) |
|-------------|-------------|----------------------|-------------|---------|-------------|-------|-------|-------|-----------------|-----------------|----------------------|----------------|--------------------|------------------|
|             |             |                      | In-Situ     | Removed | GRO         | DRO   | MRO   | Total |                 |                 |                      |                |                    |                  |
| Sidewall-44 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.20             |
| Sidewall-45 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00198        | <0.00198        | <0.00198             | <0.001980      | <0.001980          | 6.50             |
| Sidewall-46 | 11/16/2020  | -                    | X           |         | <49.9       | <49.9 | <49.9 | <49.9 | <0.00201        | <0.00201        | <0.00201             | <0.002010      | <0.002010          | 5.96             |
| Sidewall-47 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00202        | <0.00202        | <0.00202             | <0.002020      | <0.002020          | 7.35             |
| Sidewall-48 | 11/16/2020  | -                    | X           |         | <49.8       | <49.8 | <49.8 | <49.8 | <0.00199        | <0.00199        | <0.00199             | <0.001990      | <0.001990          | 7.56             |
| Sidewall-49 | 11/16/2020  | -                    | X           |         | <50.0       | <50.0 | <50.0 | <50.0 | <0.00200        | <0.00200        | <0.00200             | <0.002000      | <0.002000          | 7.68             |

( - ) Not Analyzed

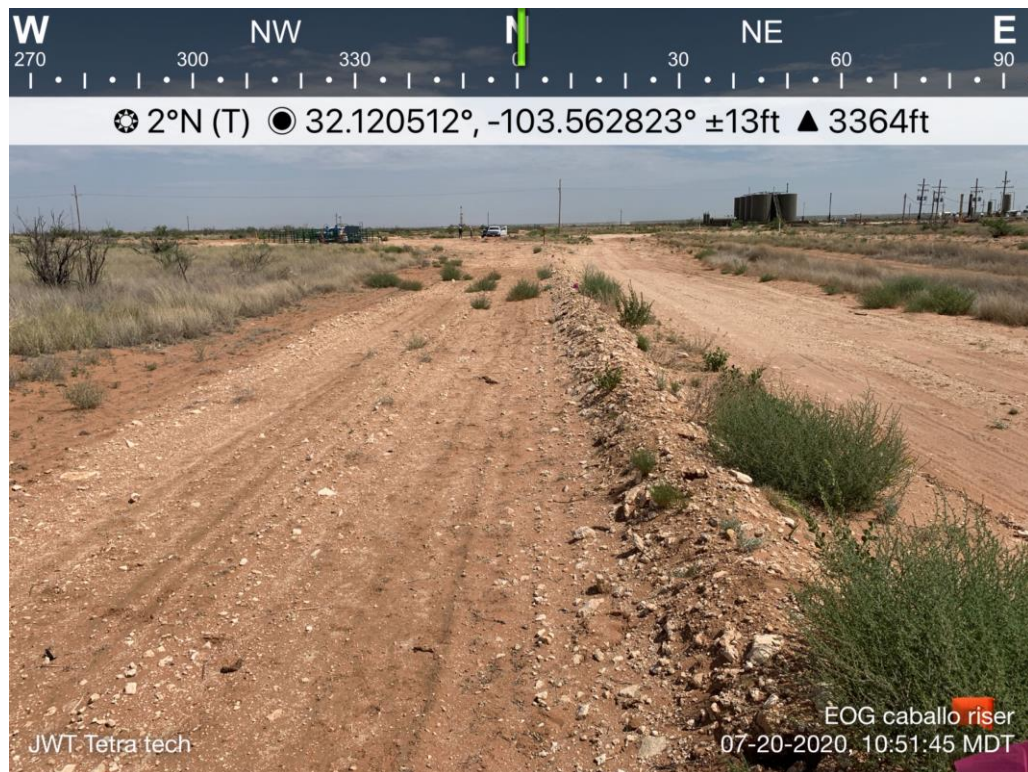


## Photos

EOG Resources  
Riser #1  
Lea County, New Mexico



View South, area of Auger Holes (1-4)



View North, area of Auger Holes (5-6)



EOG Resources  
Riser #1  
Lea County, New Mexico



View South, area of Auger Holes (6-9)



View North, area of Bottom Holes (1-10, & 21-50)



EOG Resources  
Riser #1  
Lea County, New Mexico



View South, area of Bottom Holes (11-20, & 51-61, & 93-94)



View North, area of Bottom Holes (62-80)



EOG Resources  
Riser #1  
Lea County, New Mexico



View North, area of Bottom Holes (81-92)



View Southwest, backfilled areas of Auger Holes (1-5)



EOG Resources  
Riser #1  
Lea County, New Mexico



TETRA TECH



View Northwest, backfilled areas of Auger Holes (6-9)

## Appendix A

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

State of New Mexico  
Energy Minerals and Natural  
Resources Department

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

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

|                |               |
|----------------|---------------|
| Incident ID    | NRM2019551541 |
| District RP    |               |
| Facility ID    |               |
| Application ID |               |

## Release Notification

### Responsible Party

|                                                                |                                  |
|----------------------------------------------------------------|----------------------------------|
| Responsible Party EOG Resources                                | OGRID 7377                       |
| Contact Name Todd Wells                                        | Contact Telephone (432) 686-3613 |
| Contact email Todd_Wells@eogresources.com                      | Incident # (assigned by OCD)     |
| Contact mailing address 5509 Champions Drive Midland, TX 79706 |                                  |

### Location of Release Source

Latitude 32.121379° Longitude -103.563113°  
(NAD 83 in decimal degrees to 5 decimal places)

|                                    |                            |
|------------------------------------|----------------------------|
| Site Name Riser 1                  | Site Type Reuse Water Line |
| Date Release Discovered 01/28/2020 | API# (if applicable)       |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| C           | 22      | 25S      | 33E   | Lea    |

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: BLM)

### Nature and Volume of Release

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

|                                                 |                                                                                |                                                                     |
|-------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <input type="checkbox"/> Crude Oil              | Volume Released (bbls)                                                         | Volume Recovered (bbls)                                             |
| <input checked="" type="checkbox"/> Reuse Water | Volume Released (bbls) 1,000                                                   | Volume Recovered (bbls) 200                                         |
|                                                 | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <input type="checkbox"/> Condensate             | Volume Released (bbls)                                                         | Volume Recovered (bbls)                                             |
| <input type="checkbox"/> Natural Gas            | Volume Released (Mcf)                                                          | Volume Recovered (Mcf)                                              |
| <input type="checkbox"/> Other (describe)       | Volume/Weight Released (provide units)                                         | Volume/Weight Recovered (provide units)                             |

Cause of Release: While pumping from pit to pit, a 6" valve on a booster pump malfunctioned. Approximately 1,000 bbls of reuse water released in the pipeline ROW and 200 bbls was recovered.

State of New Mexico  
Oil Conservation Division

|                |               |
|----------------|---------------|
| Incident ID    | NRM2019551541 |
| District RP    |               |
| Facility ID    |               |
| Application ID |               |

|                                                                                                                                       |                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? More than 25 bbls. |
| If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? No                       |                                                                                                         |

### Initial Response

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| <input checked="" type="checkbox"/> The source of the release has been stopped.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                        |
| <input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                        |
| <input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                        |
| <input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                        |
| If all the actions described above have <u>not</u> been undertaken, explain why:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                        |
| Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.                                                                                                                                                                                                                                                                                                                                                                                      |                                        |
| I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. |                                        |
| Printed Name: <u>Todd Wells</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Title: <u>Environmental Specialist</u> |
| Signature: _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Date: <u>7-6-20</u>                    |
| email: <u>Todd_Wells@eogresources.com</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Telephone: <u>(432) 686-3613</u>       |
| <b><u>OCD Only</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                        |
| Received by: <u>Ramona Marcus</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Date: <u>7/13/2020</u>                 |



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

## Site Assessment/Characterization

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

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

|                |  |
|----------------|--|
| 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: Todd Wells 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: Todd Wells Date: \_\_\_\_\_

email: \_\_\_\_\_ Telephone: \_\_\_\_\_

**OCD Only**

Received by: \_\_\_\_\_ Date: \_\_\_\_\_

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

Closure Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Printed Name: \_\_\_\_\_ Title: \_\_\_\_\_

## Appendix B

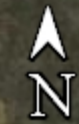


EOG Resources

Riser #1

**Legend**

- 0.50 miles
- EOG - Riser #1
- Groundwater Determination Bore





**SCARBOROUGH DRILLING, INC.**

TEST HOLES • WATER WELLS

P.O. Box 305 - Ph. 806-872-3285 or 872-9349

LAMESA, TEXAS 79331

2001 South Hwy. 87

**WELL LOG**

| From | To | FORMATION                  |
|------|----|----------------------------|
| 0    | 5  | Top Soil                   |
| 5    | 20 | Caliche                    |
| 20   | 35 | Caliche w/ Red Sand        |
| 35   | 50 | Tan Sand w/ Caliche layers |
| 50   | 55 | Dry Silty Sand             |
|      |    | BH-1                       |
|      |    | EOG - Caballo Riser        |
|      |    | Plugged w/ Hole Plug       |
|      |    | No water Detected          |
|      |    | 32.120658 - 103.563616     |
|      |    |                            |
|      |    |                            |
|      |    |                            |
|      |    |                            |
|      |    |                            |
|      |    |                            |
|      |    |                            |

Date 8-20-20 Driller Loe Searles

GIBBS PRINTING CO. - LAMESA, TX



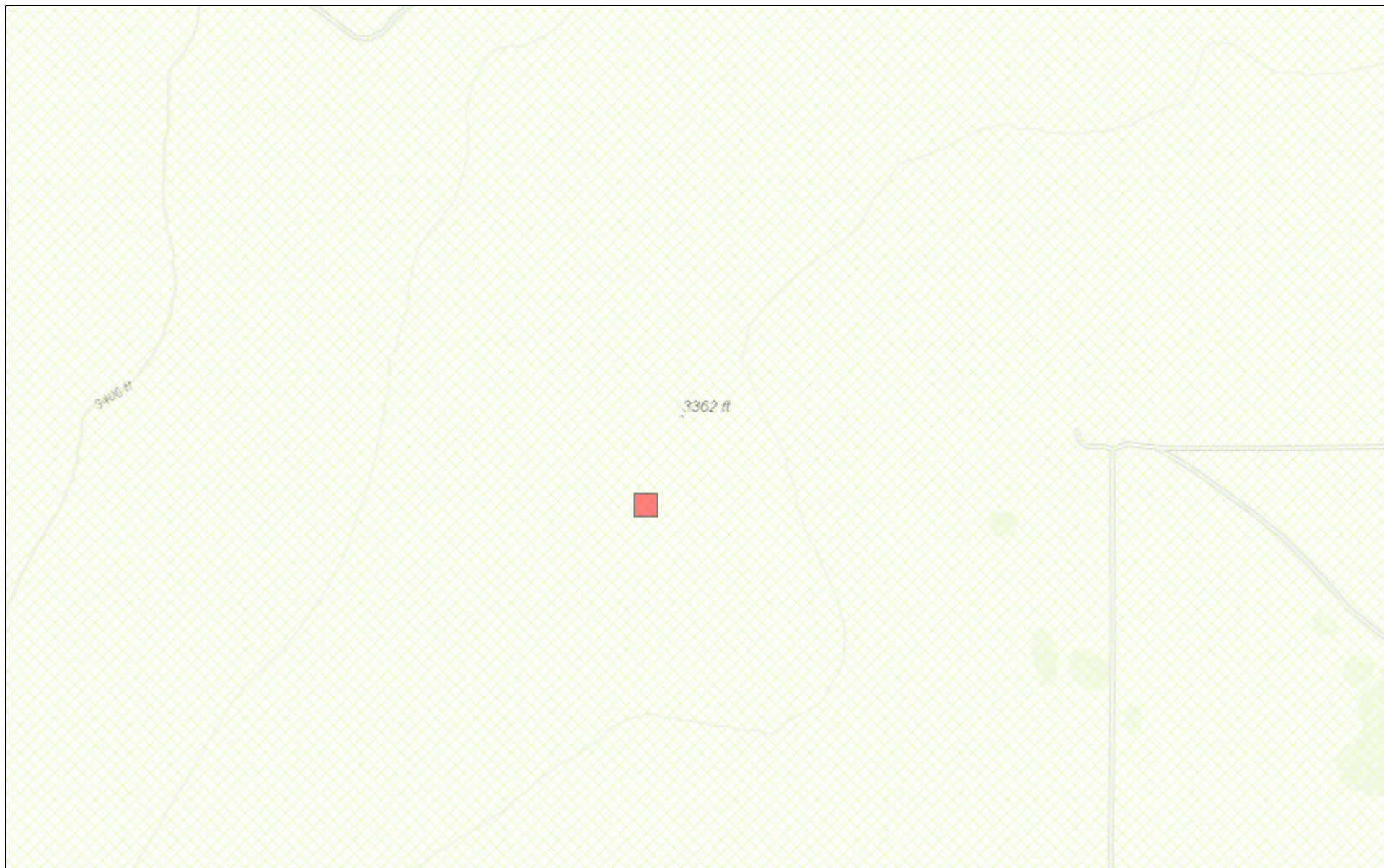
National Water Information System: Mapper



Site Information

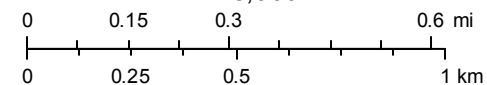


# New Mexico NFHL Data



July 30, 2020

1:18,056



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



USGS Home  
Contact USGS  
Search USGS

National Water Information System: Web Interface

USGS Water Resources

Data Category:  
Groundwater

Geographic Area:  
New Mexico

GO

Click to hideNews Bulletins

- Introducing The Next Generation of USGS Water Data for the Nation
- Full News

Groundwater levels for New Mexico

Click to hide state-specific text

Search Results -- 1 sites found

Agency code = usgs  
site\_no list =

- 320631103351401

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

USGS 320631103351401 25S.33E.20.443313

Lea County, New Mexico  
Latitude 32°06'31", Longitude 103°35'14" NAD27  
Land-surface elevation 3,398 feet above NAVD88  
This well is completed in the Chinle Formation (231CHNL) local aquifer.

Output formats

Table of data

Tab-separated data

Graph of data

Reselect period

|                      |                      |                                     |                                      |                                                 |                           |                           |                      |                            |                       |                            |                                  |
|----------------------|----------------------|-------------------------------------|--------------------------------------|-------------------------------------------------|---------------------------|---------------------------|----------------------|----------------------------|-----------------------|----------------------------|----------------------------------|
| Date                 | Time                 | ?<br>Water-level date-time accuracy | Water level, feet below land surface | Water level, feet above specific vertical datum | Referenced vertical datum | ?<br>Water-level accuracy | ?<br>Status          | ?<br>Method of measurement | ?<br>Measuring agency | ?<br>Source of measurement | ?<br>Water-level approval status |
| <input type="text"/> | <input type="text"/> | <input type="text"/>                | <input type="text"/>                 | <input type="text"/>                            | <input type="text"/>      | <input type="text"/>      | <input type="text"/> | <input type="text"/>       | <input type="text"/>  | <input type="text"/>       | <input type="text"/>             |
| 1981-03-25           |                      | D                                   | 204.36                               |                                                 |                           | 2                         |                      | U                          |                       | U                          | A                                |

Explanation

| Section                        | Code | Description                                                    |
|--------------------------------|------|----------------------------------------------------------------|
| Water-level date-time accuracy | D    | Date is accurate to the Day                                    |
| Water-level accuracy           | 2    | Water level accuracy to nearest hundredth of a foot            |
| Status                         |      | The reported water-level measurement represents a static level |
| Method of measurement          | U    | Unknown method.                                                |
| Measuring agency               |      | Not determined                                                 |
| Source of measurement          | U    | Source is unknown.                                             |
| Water-level approval status    | A    | Approved for publication -- Processing and review completed.   |

- [Questions about sites/data?](#)  
[Feedback on this web site](#)  
[Automated retrievals](#)  
[Help](#)  
[Data Tips](#)  
[Explanation of terms](#)  
[Subscribe for system changes](#)  
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Accessibility   Plug-Ins   FOIA   Privacy   Policies and Notices  
[U.S. Department of the Interior](#) | [U.S. Geological Survey](#)  
Title: Groundwater for New Mexico: Water Levels  
URL: [https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site\\_no=320631103351401&agency\\_cd=USGS&format=html](https://nwis.waterdata.usgs.gov/nm/nwis/gwlevels?site_no=320631103351401&agency_cd=USGS&format=html)

Page Contact Information: [New Mexico Water Data Maintainer](#)  
Page Last Modified: 2020-07-31 06:13:17 EDT  
9.82 0.27 nadww01







# 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 Code | Sub-basin | County | Q 64 | Q 16 | Q 4 | Sec | Tws | Rng | X      | Y        | Depth Well | Depth Water | Water Column |
|-----------------------------------|----------|-----------|--------|------|------|-----|-----|-----|-----|--------|----------|------------|-------------|--------------|
| <a href="#">C 02312</a>           |          | CUB       | LE     | 1    | 2    | 1   | 05  | 25S | 33E | 632292 | 3559772  | 150        | 90          | 60           |
| <a href="#">C 02313</a>           |          | CUB       | LE     | 2    | 3    | 3   | 26  | 25S | 33E | 636971 | 3552098* | 150        | 110         | 40           |
| <a href="#">C 02373 CLW317846</a> | O        | CUB       | LE     | 2    | 1    | 1   | 13  | 25S | 33E | 638518 | 3556544* | 625        | 185         | 440          |
| <a href="#">C 02373 S</a>         |          | CUB       | LE     | 1    | 2    | 1   | 13  | 25S | 33E | 638721 | 3556549* | 625        | 185         | 440          |

Average Depth to Water: **142 feet**

Minimum Depth: **90 feet**

Maximum Depth: **185 feet**

**Record Count:** 4

### Basin/County Search:

**County:** Lea

### PLSS Search:

**Township:** 25S

**Range:** 33E

\*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.

7/30/20 10:38 AM

Page 1 of 1

WATER COLUMN/ AVERAGE  
DEPTH TO WATER

# Low Karst

EOG Resources  
Riser #1

## Legend

-  High
-  Lomas Rojas
-  Low
-  Medium

Caballo Riser 

Google Earth



5 mi

**Water Well Data**  
**Average Depth to Groundwater (ft)**  
**Riser #1**  
**Lea County, New Mexico**

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

| 24 South |    |      | 33 East |    |    |
|----------|----|------|---------|----|----|
| 6        | 5  | 4    | 3       | 2  | 1  |
| 7        | 8  | 9    | 10      | 20 | 11 |
| 18       | 17 | 16   | 15      | 14 | 13 |
| 19       | 20 | 21   | 22      | 23 | 24 |
| 30       | 29 | 28   | 27      | 26 | 25 |
| 31       | 32 | 33   | 70      | 34 | 35 |
|          |    | 93.2 |         |    |    |

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

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

| 25 South |     |    | 33 East |     |    |
|----------|-----|----|---------|-----|----|
| 6        | 5   | 4  | 3       | 172 | 2  |
|          | 118 |    |         |     | 1  |
| 7        | 8   | 9  | 10      | 11  | 12 |
| 18       | 17  | 16 | 15      | 14  | 13 |
| 19       | 20  | 21 | 22      | 23  | 24 |
| 30       | 29  | 28 | 27      | 26  | 25 |
| 31       | 32  | 33 | 34      | 35  | 36 |
|          | 190 |    |         |     |    |

| 25 South |    |    | 34 East |    |     |
|----------|----|----|---------|----|-----|
| 6        | 5  | 4  | 3       | 2  | 1   |
| 7        | 8  | 9  | 10      | 11 | 12  |
| 18       | 17 | 16 | 15      | 14 | 13  |
| 19       | 20 | 21 | 22      | 23 | 24  |
| 30       | 29 | 28 | 27      | 26 | 25  |
| 31       | 32 | 33 | 34      | 35 | 36  |
|          |    |    |         |    | 260 |

| 26 South |    |    | 32 East |    |    |
|----------|----|----|---------|----|----|
| 6        | 5  | 4  | 3       | 2  | 1  |
| 7        | 8  | 9  | 10      | 11 | 12 |
| 18       | 17 | 16 | 15      | 14 | 13 |
| 19       | 20 | 21 | 333     | 22 | 23 |
| 30       | 29 | 28 | 27      | 26 | 25 |
| 31       | 32 | 33 | 34      | 35 | 36 |
| 295      |    |    |         |    |    |

| 26 South |    |    | 33 East |     |    |
|----------|----|----|---------|-----|----|
| 6        | 5  | 4  | 3       | 180 | 2  |
| 7        | 8  | 9  | 106     | 10  | 11 |
| 18       | 17 | 16 | 15      | 14  | 13 |
| 19       | 20 | 21 | 22      | 23  | 24 |
| 30       | 29 | 28 | 27      | 26  | 25 |
| 31       | 32 | 33 | 34      | 35  | 36 |
|          |    |    |         |     |    |

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

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

## Appendix C



## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Date Received in Lab: Tue 07.21.2020 09:39

Contact: Mike Carmona

Report Date: 07.24.2020 16:40

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-001       | 667722-002       | 667722-003       | 667722-004       | 667722-005       | 667722-006       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | AH-1 0-1'        | AH-1 1'-1.5'     | AH-1 2'-2.5'     | AH-1 3'-3.5'     | AH-2 0-1'        | AH-2 1'-1.5'     |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.22.2020 17:00 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 |
|                                          | <i>Analyzed:</i>  | 07.23.2020 13:09 | 07.23.2020 22:32 | 07.24.2020 10:34 | 07.24.2020 10:54 | 07.24.2020 11:15 | 07.24.2020 11:36 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| Toluene                                  |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| Ethylbenzene                             |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| m,p-Xylenes                              |                   | <0.00398 0.00398 | <0.00398 0.00398 | <0.00399 0.00399 | <0.00400 0.00400 | <0.00400 0.00400 | <0.00396 0.00396 |
| o-Xylene                                 |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| Total Xylenes                            |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| Total BTEX                               |                   | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00198 0.00198 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 13:50 | 07.21.2020 13:56 | 07.21.2020 14:14 | 07.21.2020 14:20 | 07.21.2020 14:26 | 07.21.2020 14:33 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 13.9 4.98        | 9.64 4.95        | 7.26 5.05        | 5.90 5.05        | 11.3 5.05        | <5.00 5.00       |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 13:51 | 07.21.2020 14:56 | 07.21.2020 15:17 | 07.21.2020 15:39 | 07.21.2020 16:01 | 07.21.2020 16:22 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Total TPH                                |                   | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Date Received in Lab: Tue 07.21.2020 09:39

Contact: Mike Carmona

Report Date: 07.24.2020 16:40

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-007       | 667722-008       | 667722-009       | 667722-010       | 667722-011       | 667722-012       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | AH-2 2'-2.5'     | AH-2 3'-3.5'     | AH-3 0-1'        | AH-3 1'-1.5'     | AH-3 2'-2.5'     | AH-4 0-1'        |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.23.2020 15:30 | 07.22.2020 09:00 |
|                                          | <i>Analyzed:</i>  | 07.24.2020 11:56 | 07.24.2020 12:17 | 07.24.2020 12:37 | 07.24.2020 12:58 | 07.24.2020 13:19 | 07.22.2020 15:58 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| Toluene                                  |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| Ethylbenzene                             |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| m,p-Xylenes                              |                   | <0.00401 0.00401 | <0.00398 0.00398 | <0.00398 0.00398 | <0.00400 0.00400 | <0.00398 0.00398 | <0.00396 0.00396 |
| o-Xylene                                 |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| Total Xylenes                            |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| Total BTEX                               |                   | <0.00200 0.00200 | <0.00199 0.00199 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00199 0.00199 | <0.00198 0.00198 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 14:39 | 07.21.2020 14:45 | 07.21.2020 15:03 | 07.21.2020 15:10 | 07.21.2020 15:28 | 07.21.2020 15:34 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | <5.03 5.03       | 5.96 4.98        | 473 4.96         | 1270 4.98        | 4160 25.0        | <5.02 5.02       |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 16:44 | 07.21.2020 17:06 | 07.21.2020 17:28 | 07.21.2020 17:49 | 07.21.2020 18:32 | 07.21.2020 18:54 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Total TPH                                |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Tue 07.21.2020 09:39

Report Date: 07.24.2020 16:40

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-013       | 667722-014       | 667722-015       | 667722-016       | 667722-017       | 667722-018       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | AH-4 1'-1.5'     | AH-4 2'-2.5'     | AH-4 3'-3.5'     | AH-5 0-1'        | AH-5 1'-1.5'     | AH-5 2'-2.5'     |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.22.2020 09:00 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 16:19 | 07.22.2020 16:39 | 07.22.2020 17:00 | 07.22.2020 17:20 | 07.22.2020 17:41 | 07.22.2020 18:01 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| Toluene                                  |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| Ethylbenzene                             |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| m,p-Xylenes                              |                   | <0.00396 0.00396 | <0.00398 0.00398 | <0.00400 0.00400 | <0.00397 0.00397 | <0.00398 0.00398 | <0.00398 0.00398 |
| o-Xylene                                 |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| Total Xylenes                            |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| Total BTEX                               |                   | <0.00198 0.00198 | <0.00199 0.00199 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00199 0.00199 | <0.00199 0.00199 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 15:10 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 15:40 | 07.21.2020 15:46 | 07.21.2020 15:53 | 07.21.2020 15:59 | 07.21.2020 16:05 | 07.21.2020 23:10 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 6.74 5.00        | 16.9 5.00        | 38.5 5.00        | 78.0 5.03        | 275 4.99         | 2370 X 25.0      |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 12:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 19:16 | 07.21.2020 19:37 | 07.21.2020 19:58 | 07.21.2020 20:20 | 07.21.2020 20:41 | 07.21.2020 21:02 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8       | <49.9 49.9       | <49.8 49.8       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8       | <49.9 49.9       | <49.8 49.8       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8       | <49.9 49.9       | <49.8 49.8       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       |
| Total TPH                                |                   | <49.8 49.8       | <49.9 49.9       | <49.8 49.8       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       |

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## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Date Received in Lab: Tue 07.21.2020 09:39

Contact: Mike Carmona

Report Date: 07.24.2020 16:40

Project Location: Lea County, New Mexico

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-019       | 667722-020       | 667722-021       | 667722-022       | 667722-023       | 667722-024       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | AH-6 0-1'        | AH-6 1'-1.5'     | AH-6 2'-2.5'     | AH-7 0-1'        | AH-7 1'-1.5'     | AH-7 2'-2.5'     |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.22.2020 09:00 | 07.23.2020 14:30 | 07.23.2020 14:30 | 07.23.2020 14:30 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 18:22 | 07.22.2020 18:42 | 07.22.2020 19:02 | 07.24.2020 12:04 | 07.24.2020 12:24 | 07.24.2020 12:45 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| Toluene                                  |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| Ethylbenzene                             |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| m,p-Xylenes                              |                   | <0.00398 0.00398 | <0.00400 0.00400 | <0.00399 0.00399 | <0.00404 0.00404 | <0.00397 0.00397 | <0.00400 0.00400 |
| o-Xylene                                 |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| Total Xylenes                            |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| Total BTEX                               |                   | <0.00199 0.00199 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 23:26 | 07.21.2020 23:31 | 07.21.2020 23:36 | 07.21.2020 23:42 | 07.22.2020 09:32 | 07.22.2020 09:37 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 59.9 5.03        | 226 4.96         | 2480 25.0        | 31.1 5.00        | 115 4.98         | 2160 25.1        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 12:00 | 07.21.2020 12:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 |
|                                          | <i>Analyzed:</i>  | 07.21.2020 21:24 | 07.21.2020 21:45 | 07.21.2020 23:32 | 07.22.2020 00:36 | 07.22.2020 00:57 | 07.22.2020 01:18 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Total TPH                                |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |

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## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Tue 07.21.2020 09:39

Report Date: 07.24.2020 16:40

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-025       | 667722-026       | 667722-027       | 667722-028       | 667722-029       | 667722-030       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | AH-8 0-1'        | AH-8 1'-1.5'     | AH-8 2'-2.5'     | AH-9 0-1'        | AH-9 1'-1.5'     | AH-9 2'-2.5'     |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.23.2020 14:30 | 07.23.2020 14:30 | 07.23.2020 14:30 | 07.23.2020 14:30 | 07.23.2020 14:30 | 07.23.2020 14:30 |
|                                          | <i>Analyzed:</i>  | 07.24.2020 13:05 | 07.24.2020 13:26 | 07.24.2020 13:46 | 07.24.2020 14:07 | 07.24.2020 14:27 | 07.24.2020 14:48 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| Toluene                                  |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| Ethylbenzene                             |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| m,p-Xylenes                              |                   | <0.00399 0.00399 | <0.00399 0.00399 | <0.00402 0.00402 | <0.00401 0.00401 | <0.00396 0.00396 | <0.00399 0.00399 |
| o-Xylene                                 |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| Total Xylenes                            |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| Total BTEX                               |                   | <0.00200 0.00200 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00200 0.00200 | <0.00198 0.00198 | <0.00200 0.00200 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 09:43 | 07.22.2020 09:48 | 07.22.2020 09:53 | 07.22.2020 09:58 | 07.22.2020 10:14 | 07.21.2020 23:57 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 27.1 4.99        | 29.2 5.05        | 166 4.98         | 20.5 5.00        | 18.5 5.04        | 122 4.99         |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 01:39 | 07.22.2020 02:00 | 07.22.2020 02:21 | 07.22.2020 02:42 | 07.22.2020 03:03 | 07.22.2020 03:24 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0       | <49.8 49.8       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0       | <49.8 49.8       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0       | <49.8 49.8       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |
| Total TPH                                |                   | <50.0 50.0       | <49.8 49.8       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <49.9 49.9       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Tue 07.21.2020 09:39

Report Date: 07.24.2020 16:40

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-031       | 667722-032       | 667722-033       | 667722-034       | 667722-035       | 667722-036       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | H-1 0-6"         | H-2 0-6"         | H-3 0-6"         | H-4 0-6"         | H-5 0-6"         | H-6 0-6"         |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 07.23.2020 14:30 | ** ** ** *       | ** ** ** *       | ** ** ** *       | ** ** ** *       | ** ** ** *       |
|                                          | <i>Analyzed:</i>  | 07.24.2020 15:08 | 07.23.2020 08:22 | 07.23.2020 08:42 | 07.23.2020 09:03 | 07.23.2020 09:23 | 07.23.2020 09:44 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| Toluene                                  |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| Ethylbenzene                             |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| m,p-Xylenes                              |                   | <0.00399 0.00399 | <0.00403 0.00403 | <0.00397 0.00397 | <0.00399 0.00399 | <0.00399 0.00399 | <0.00404 0.00404 |
| o-Xylene                                 |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| Total Xylenes                            |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| Total BTEX                               |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00198 0.00198 | <0.00200 0.00200 | <0.00200 0.00200 | <0.00202 0.00202 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 | 07.21.2020 15:10 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 00:03 | 07.22.2020 00:08 | 07.22.2020 00:13 | 07.22.2020 00:18 | 07.22.2020 00:23 | 07.22.2020 01:26 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 23.3 4.97        | 9.94 5.03        | 23.5 5.00        | 36.8 5.00        | 9.74 5.00        | 885 5.05         |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 04:06 | 07.22.2020 04:27 | 07.22.2020 04:48 | 07.22.2020 05:08 | 07.22.2020 05:29 | 07.22.2020 05:50 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <49.8 49.8       |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <49.8 49.8       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <49.8 49.8       |
| Total TPH                                |                   | <49.8 49.8       | <50.0 50.0       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <49.8 49.8       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Tue 07.21.2020 09:39

Report Date: 07.24.2020 16:40

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 667722-037       | 667722-038       | 667722-039       | 667722-040       | 667722-041       | 667722-042       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | H-7 0-6"         | H-8 0-6"         | H-9 0-6"         | H-10 0-6"        | H-11 0-6"        | H-12 0-6"        |
|                                          | <i>Depth:</i>     |                  |                  |                  |                  |                  |                  |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 | 07.20.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | *** ** *         | ** ** ** *       | *** ** *         | ** ** ** *       | *** ** ** *      | ** ** ** ** *    |
|                                          | <i>Analyzed:</i>  | 07.23.2020 10:04 | 07.23.2020 12:49 | 07.23.2020 13:10 | 07.23.2020 13:30 | 07.23.2020 13:51 | 07.23.2020 14:11 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Benzene                                  |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| Toluene                                  |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| Ethylbenzene                             |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| m,p-Xylenes                              |                   | <0.00401 0.00401 | <0.00403 0.00403 | <0.00399 0.00399 | <0.00402 0.00402 | <0.00402 0.00402 | <0.00403 0.00403 |
| o-Xylene                                 |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| Total Xylenes                            |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| Total BTEX                               |                   | <0.00200 0.00200 | <0.00202 0.00202 | <0.00200 0.00200 | <0.00201 0.00201 | <0.00201 0.00201 | <0.00202 0.00202 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 07.21.2020 15:10 | 07.21.2020 15:30 | 07.21.2020 15:30 | 07.21.2020 15:30 | 07.21.2020 15:30 | 07.21.2020 15:30 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 01:31 | 07.21.2020 16:48 | 07.21.2020 17:06 | 07.21.2020 17:13 | 07.21.2020 17:19 | 07.21.2020 17:25 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 490 4.98         | <4.99 4.99       | 103 5.00         | <4.96 4.96       | <4.98 4.98       | <5.04 5.04       |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 13:00 | 07.21.2020 12:00 | 07.21.2020 12:00 |
|                                          | <i>Analyzed:</i>  | 07.22.2020 06:11 | 07.22.2020 06:32 | 07.22.2020 06:53 | 07.22.2020 07:13 | 07.21.2020 21:02 | 07.21.2020 21:24 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |
| Total TPH                                |                   | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       | <50.0 50.0       | <49.9 49.9       | <50.0 50.0       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 667722

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser 1

Project Id:

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Tue 07.21.2020 09:39

Report Date: 07.24.2020 16:40

Project Manager: Jessica Kramer

|                                          |                                                                                                                                     |  |  |  |  |  |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| <b>Analysis Requested</b>                | <b>Lab Id:</b> 667722-043<br><b>Field Id:</b> H-13 0-6"<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 07.20.2020 00:00 |  |  |  |  |  |
| <b>BTEX by EPA 8021B</b>                 | <b>Extracted:</b> *** ** *<br><b>Analyzed:</b> 07.23.2020 14:32<br><b>Units/RL:</b> mg/kg RL                                        |  |  |  |  |  |
| Benzene                                  | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| Toluene                                  | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| Ethylbenzene                             | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| m,p-Xylenes                              | <0.00401 0.00401                                                                                                                    |  |  |  |  |  |
| o-Xylene                                 | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| Total Xylenes                            | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| Total BTEX                               | <0.00200 0.00200                                                                                                                    |  |  |  |  |  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <b>Extracted:</b> 07.21.2020 15:30<br><b>Analyzed:</b> 07.21.2020 17:43<br><b>Units/RL:</b> mg/kg RL                                |  |  |  |  |  |
| Chloride                                 | <4.97 4.97                                                                                                                          |  |  |  |  |  |
| <b>TPH By SW8015 Mod</b>                 | <b>Extracted:</b> 07.21.2020 12:00<br><b>Analyzed:</b> 07.21.2020 21:45<br><b>Units/RL:</b> mg/kg RL                                |  |  |  |  |  |
| Gasoline Range Hydrocarbons (GRO)        | <49.9 49.9                                                                                                                          |  |  |  |  |  |
| Diesel Range Organics (DRO)              | <49.9 49.9                                                                                                                          |  |  |  |  |  |
| Motor Oil Range Hydrocarbons (MRO)       | <49.9 49.9                                                                                                                          |  |  |  |  |  |
| Total TPH                                | <49.9 49.9                                                                                                                          |  |  |  |  |  |

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Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico





# Analytical Report 667722

for

**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Caballo Riser 1**

**07.24.2020**

Collected By: Client



**1211 W. Florida Ave  
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-36), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-20-25), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-17)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-22)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-19)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-7)  
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



07.24.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **667722**

**Caballo Riser 1**

Project Address: Lea County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 667722. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 667722 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

---

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Sample Cross Reference 667722

## Tetra Tech- Midland, Midland, TX

## Caballo Riser 1

| Sample Id    | Matrix | Date Collected   | Sample Depth | Lab Sample Id |
|--------------|--------|------------------|--------------|---------------|
| AH-1 0-1'    | S      | 07.20.2020 00:00 |              | 667722-001    |
| AH-1 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-002    |
| AH-1 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-003    |
| AH-1 3'-3.5' | S      | 07.20.2020 00:00 |              | 667722-004    |
| AH-2 0-1'    | S      | 07.20.2020 00:00 |              | 667722-005    |
| AH-2 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-006    |
| AH-2 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-007    |
| AH-2 3'-3.5' | S      | 07.20.2020 00:00 |              | 667722-008    |
| AH-3 0-1'    | S      | 07.20.2020 00:00 |              | 667722-009    |
| AH-3 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-010    |
| AH-3 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-011    |
| AH-4 0-1'    | S      | 07.20.2020 00:00 |              | 667722-012    |
| AH-4 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-013    |
| AH-4 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-014    |
| AH-4 3'-3.5' | S      | 07.20.2020 00:00 |              | 667722-015    |
| AH-5 0-1'    | S      | 07.20.2020 00:00 |              | 667722-016    |
| AH-5 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-017    |
| AH-5 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-018    |
| AH-6 0-1'    | S      | 07.20.2020 00:00 |              | 667722-019    |
| AH-6 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-020    |
| AH-6 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-021    |
| AH-7 0-1'    | S      | 07.20.2020 00:00 |              | 667722-022    |
| AH-7 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-023    |
| AH-7 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-024    |
| AH-8 0-1'    | S      | 07.20.2020 00:00 |              | 667722-025    |
| AH-8 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-026    |
| AH-8 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-027    |
| AH-9 0-1'    | S      | 07.20.2020 00:00 |              | 667722-028    |
| AH-9 1'-1.5' | S      | 07.20.2020 00:00 |              | 667722-029    |
| AH-9 2'-2.5' | S      | 07.20.2020 00:00 |              | 667722-030    |
| H-1 0-6"     | S      | 07.20.2020 00:00 |              | 667722-031    |
| H-2 0-6"     | S      | 07.20.2020 00:00 |              | 667722-032    |
| H-3 0-6"     | S      | 07.20.2020 00:00 |              | 667722-033    |
| H-4 0-6"     | S      | 07.20.2020 00:00 |              | 667722-034    |
| H-5 0-6"     | S      | 07.20.2020 00:00 |              | 667722-035    |
| H-6 0-6"     | S      | 07.20.2020 00:00 |              | 667722-036    |
| H-7 0-6"     | S      | 07.20.2020 00:00 |              | 667722-037    |
| H-8 0-6"     | S      | 07.20.2020 00:00 |              | 667722-038    |
| H-9 0-6"     | S      | 07.20.2020 00:00 |              | 667722-039    |
| H-10 0-6"    | S      | 07.20.2020 00:00 |              | 667722-040    |
| H-11 0-6"    | S      | 07.20.2020 00:00 |              | 667722-041    |
| H-12 0-6"    | S      | 07.20.2020 00:00 |              | 667722-042    |
| H-13 0-6"    | S      | 07.20.2020 00:00 |              | 667722-043    |

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Caballo Riser 1**Project ID:  
Work Order Number(s): 667722Report Date: 07.24.2020  
Date Received: 07.21.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3132280 Inorganic Anions by EPA 300/300.1

Lab Sample ID 667722-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667722-018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036, -037.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3132446 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 667722-001.

Batch: LBA-3132458 BTEX by EPA 8021B

Lab Sample ID 667722-032 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). m,p-Xylenes recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667722-032, -033, -034, -035, -036, -037, -038, -039, -040, -041, -042, -043.

The Laboratory Control Sample for m,p-Xylenes is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3132581 BTEX by EPA 8021B

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 667722-022, -023, -024, -025, -026, -027, -028, -029, -030, -031

Lab Sample ID 667722-028 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 667722-022, -023, -024, -025, -026, -027, -028, -029, -030, -031.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.





## CASE NARRATIVE

***Client Name: Tetra Tech- Midland***

***Project Name: Caballo Riser 1***

Project ID:  
Work Order Number(s): 667722

Report Date: 07.24.2020  
Date Received: 07.21.2020

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# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-001 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 13.9   | 4.98 | mg/kg | 07.21.2020 13:50 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 13:51 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 13:51 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 13:51 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 13:51 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 102        | %     | 70-130 | 07.21.2020 13:51 |      |
| o-Terphenyl    | 84-15-1    | 94         | %     | 70-130 | 07.21.2020 13:51 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-001

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: AMF

% Moisture:

Analyst: AMF

Date Prep: 07.22.2020 17:00

Basis: Wet Weight

Seq Number: 3132446

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 13:09     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 90                | %            | 70-130        | 07.23.2020 13:09     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 143               | %            | 70-130        | 07.23.2020 13:09     | **          |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-002

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 9.64   | 4.95 | mg/kg | 07.21.2020 13:56 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 14:56 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 14:56 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 14:56 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 14:56 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 106        | %     | 70-130 | 07.21.2020 14:56 |      |
| o-Terphenyl    | 84-15-1    | 100        | %     | 70-130 | 07.21.2020 14:56 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-002

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.23.2020 22:32     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 113               | %            | 70-130        | 07.23.2020 22:32     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 112               | %            | 70-130        | 07.23.2020 22:32     |             |     |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-003

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.26   | 5.05 | mg/kg | 07.21.2020 14:14 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 15:17 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 15:17 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 15:17 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 15:17 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 107        | %     | 70-130 | 07.21.2020 15:17 |      |
| o-Terphenyl    | 84-15-1    | 100        | %     | 70-130 | 07.21.2020 15:17 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-003

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 10:34     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 07.24.2020 10:34     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 07.24.2020 10:34     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-004

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5.90   | 5.05 | mg/kg | 07.21.2020 14:20 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 15:39 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 15:39 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 15:39 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 15:39 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 112        | %     | 70-130 | 07.21.2020 15:39 |      |
| o-Terphenyl    | 84-15-1    | 105        | %     | 70-130 | 07.21.2020 15:39 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-1 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-004

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| Toluene       | 108-88-3    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00400 | 0.00400 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |
| Total BTEX    |             | <0.00200 | 0.00200 | mg/kg | 07.24.2020 10:54 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 116        | %     | 70-130 | 07.24.2020 10:54 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 108        | %     | 70-130 | 07.24.2020 10:54 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-005 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 11.3   | 5.05 | mg/kg | 07.21.2020 14:26 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 16:01 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 16:01 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 16:01 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 16:01 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 101        | %     | 70-130 | 07.21.2020 16:01 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-130 | 07.21.2020 16:01 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-005

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:15     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 07.24.2020 11:15     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 120               | %            | 70-130        | 07.24.2020 11:15     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-006

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <5.00  | 5.00 | mg/kg | 07.21.2020 14:33 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 16:22 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 16:22 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 16:22 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 16:22 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 102        | %     | 70-130 | 07.21.2020 16:22 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-130 | 07.21.2020 16:22 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-006

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 11:36     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 07.24.2020 11:36     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 117               | %            | 70-130        | 07.24.2020 11:36     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-007

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <5.03  | 5.03 | mg/kg | 07.21.2020 14:39 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.21.2020 16:44 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.21.2020 16:44 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.21.2020 16:44 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.21.2020 16:44 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 95         | %     | 70-130 | 07.21.2020 16:44 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-130 | 07.21.2020 16:44 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-007

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 11:56     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 114               | %            | 70-130        | 07.24.2020 11:56     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 114               | %            | 70-130        | 07.24.2020 11:56     |             |     |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-008

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5.96   | 4.98 | mg/kg | 07.21.2020 14:45 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 17:06 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 17:06 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 17:06 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 17:06 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 98         | %     | 70-130 | 07.21.2020 17:06 |      |
| o-Terphenyl    | 84-15-1    | 96         | %     | 70-130 | 07.21.2020 17:06 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-2 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-008

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:17     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 106               | %            | 70-130        | 07.24.2020 12:17     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 115               | %            | 70-130        | 07.24.2020 12:17     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-009 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 473    | 4.96 | mg/kg | 07.21.2020 15:03 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 17:28 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 17:28 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 17:28 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 17:28 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 99         | %     | 70-130 | 07.21.2020 17:28 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-130 | 07.21.2020 17:28 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-009

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.24.2020 12:37     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 116               | %            | 70-130        | 07.24.2020 12:37     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 70-130        | 07.24.2020 12:37     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-010

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1270   | 4.98 | mg/kg | 07.21.2020 15:10 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 17:49 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 17:49 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 17:49 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 17:49 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.21.2020 17:49 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-130 | 07.21.2020 17:49 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-010

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 115               | %            | 70-130        | 07.24.2020 12:58     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 07.24.2020 12:58     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-011

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4160   | 25.0 | mg/kg | 07.21.2020 15:28 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 18:32 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 18:32 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 18:32 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 18:32 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 99         | %     | 70-130 | 07.21.2020 18:32 |      |
| o-Terphenyl    | 84-15-1    | 98         | %     | 70-130 | 07.21.2020 18:32 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-3 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-011

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 15:30

Basis: Wet Weight

Seq Number: 3132552

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| Toluene       | 108-88-3    | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00398 | 0.00398 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |
| Total BTEX    |             | <0.00199 | 0.00199 | mg/kg | 07.24.2020 13:19 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 113        | %     | 70-130 | 07.24.2020 13:19 |      |
| 4-Bromofluorobenzene | 460-00-4   | 108        | %     | 70-130 | 07.24.2020 13:19 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-012 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <5.02  | 5.02 | mg/kg | 07.21.2020 15:34 | U    | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 18:54 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 18:54 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 18:54 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 18:54 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 91         | %     | 70-130 | 07.21.2020 18:54 |      |
| o-Terphenyl    | 84-15-1    | 85         | %     | 70-130 | 07.21.2020 18:54 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-012

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 15:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 15:58     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 07.22.2020 15:58     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-013

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.74   | 5.00 | mg/kg | 07.21.2020 15:40 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.21.2020 19:16 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.21.2020 19:16 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.21.2020 19:16 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.21.2020 19:16 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.21.2020 19:16 |      |
| o-Terphenyl    | 84-15-1    | 93         | %     | 70-130 | 07.21.2020 19:16 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-013

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 16:19     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 16:19     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 07.22.2020 16:19     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-014

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 16.9   | 5.00 | mg/kg | 07.21.2020 15:46 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 19:37 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 19:37 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 19:37 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 19:37 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 103        | %     | 70-130 | 07.21.2020 19:37 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.21.2020 19:37 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-014

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 16:39     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 07.22.2020 16:39     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 103               | %            | 70-130        | 07.22.2020 16:39     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-015

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 38.5   | 5.00 | mg/kg | 07.21.2020 15:53 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.21.2020 19:58 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.21.2020 19:58 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.21.2020 19:58 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.21.2020 19:58 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 98         | %     | 70-130 | 07.21.2020 19:58 |      |
| o-Terphenyl    | 84-15-1    | 98         | %     | 70-130 | 07.21.2020 19:58 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-4 3'-3.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-015

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 17:00     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 17:00     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.22.2020 17:00     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-016 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 78.0   | 5.03 | mg/kg | 07.21.2020 15:59 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 20:20 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 20:20 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 20:20 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 20:20 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 98         | %     | 70-130 | 07.21.2020 20:20 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-130 | 07.21.2020 20:20 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-016

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.22.2020 17:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 07.22.2020 17:20     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 17:20     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-017

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132250

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 275    | 4.99 | mg/kg | 07.21.2020 16:05 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 20:41 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 20:41 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 20:41 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 20:41 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 102        | %     | 70-130 | 07.21.2020 20:41 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.21.2020 20:41 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-017

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 17:41     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 07.22.2020 17:41     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.22.2020 17:41     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-018

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2370   | 25.0 | mg/kg | 07.21.2020 23:10 | X    | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:02 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 104        | %     | 70-130 | 07.21.2020 21:02 |      |
| o-Terphenyl    | 84-15-1    | 102        | %     | 70-130 | 07.21.2020 21:02 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-5 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-018

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:01     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 101               | %            | 70-130        | 07.22.2020 18:01     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 07.22.2020 18:01     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-019 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 15:10 Basis: Wet Weight  
 Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 59.9   | 5.03 | mg/kg | 07.21.2020 23:26 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 12:00 Basis: Wet Weight  
 Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 101        | %     | 70-130 | 07.21.2020 21:24 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.21.2020 21:24 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-019

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 07.22.2020 18:22     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 70-130        | 07.22.2020 18:22     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 07.22.2020 18:22     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-020

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 226    | 4.96 | mg/kg | 07.21.2020 23:31 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132291

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 98         | %     | 70-130 | 07.21.2020 21:45 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.21.2020 21:45 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-020

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 18:42     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 18:42     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 07.22.2020 18:42     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-021

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2480   | 25.0 | mg/kg | 07.21.2020 23:36 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 23:32 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 23:32 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 23:32 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 23:32 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 105        | %     | 70-130 | 07.21.2020 23:32 |      |
| o-Terphenyl    | 84-15-1    | 103        | %     | 70-130 | 07.21.2020 23:32 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-6 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-021

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.22.2020 09:00

Basis: Wet Weight

Seq Number: 3132392

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.22.2020 19:02     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 07.22.2020 19:02     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.22.2020 19:02     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-022 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 15:10 Basis: Wet Weight  
 Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 31.1   | 5.00 | mg/kg | 07.21.2020 23:42 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 00:36 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 00:36 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 00:36 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 00:36 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 93         | %     | 70-130 | 07.22.2020 00:36 |      |
| o-Terphenyl    | 84-15-1    | 89         | %     | 70-130 | 07.22.2020 00:36 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-022

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 07.24.2020 12:04     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 07.24.2020 12:04     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 70-130        | 07.24.2020 12:04     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-023

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 115    | 4.98 | mg/kg | 07.22.2020 09:32 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 00:57 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 00:57 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 00:57 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 00:57 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 105        | %     | 70-130 | 07.22.2020 00:57 |      |
| o-Terphenyl    | 84-15-1    | 103        | %     | 70-130 | 07.22.2020 00:57 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-023

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| Toluene       | 108-88-3    | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00397 | 0.00397 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |
| Total BTEX    |             | <0.00198 | 0.00198 | mg/kg | 07.24.2020 12:24 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 104        | %     | 70-130 | 07.24.2020 12:24 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 101        | %     | 70-130 | 07.24.2020 12:24 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-024

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2160   | 25.1 | mg/kg | 07.22.2020 09:37 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 01:18 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 01:18 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 01:18 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 01:18 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 101        | %     | 70-130 | 07.22.2020 01:18 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.22.2020 01:18 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-7 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-024

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 12:45     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.24.2020 12:45     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 101               | %            | 70-130        | 07.24.2020 12:45     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-025 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 15:10 Basis: Wet Weight  
 Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 27.1   | 4.99 | mg/kg | 07.22.2020 09:43 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 01:39 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 01:39 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 01:39 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 01:39 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 95         | %     | 70-130 | 07.22.2020 01:39 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-130 | 07.22.2020 01:39 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 0-1'**  
Lab Sample Id: 667722-025

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| Toluene       | 108-88-3    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00399 | 0.00399 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |
| Total BTEX    |             | <0.00200 | 0.00200 | mg/kg | 07.24.2020 13:05 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 101        | %     | 70-130 | 07.24.2020 13:05 |      |
| 4-Bromofluorobenzene | 460-00-4   | 101        | %     | 70-130 | 07.24.2020 13:05 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-026

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 29.2   | 5.05 | mg/kg | 07.22.2020 09:48 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.22.2020 02:00 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.22.2020 02:00 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.22.2020 02:00 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.22.2020 02:00 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 101        | %     | 70-130 | 07.22.2020 02:00 |      |
| o-Terphenyl    | 84-15-1    | 100        | %     | 70-130 | 07.22.2020 02:00 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-026

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 13:26     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 07.24.2020 13:26     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.24.2020 13:26     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-027

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 166    | 4.98 | mg/kg | 07.22.2020 09:53 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 02:21 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 02:21 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 02:21 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 02:21 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 101        | %     | 70-130 | 07.22.2020 02:21 |      |
| o-Terphenyl    | 84-15-1    | 102        | %     | 70-130 | 07.22.2020 02:21 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-8 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-027

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 07.24.2020 13:46     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 07.24.2020 13:46     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 07.24.2020 13:46     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 0-1'** Matrix: Soil Date Received: 07.21.2020 09:39  
 Lab Sample Id: 667722-028 Date Collected: 07.20.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE % Moisture:  
 Analyst: CHE Date Prep: 07.21.2020 15:10 Basis: Wet Weight  
 Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 20.5   | 5.00 | mg/kg | 07.22.2020 09:58 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM % Moisture:  
 Analyst: ARM Date Prep: 07.21.2020 13:00 Basis: Wet Weight  
 Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 02:42 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 02:42 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 02:42 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 02:42 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 95         | %     | 70-130 | 07.22.2020 02:42 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-130 | 07.22.2020 02:42 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 0-1'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-028

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | UXF         | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | UXF         | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | UXF         | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 07.24.2020 14:07     | UXF         | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | UXF         | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:07     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.24.2020 14:07     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 07.24.2020 14:07     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-029

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 18.5   | 5.04 | mg/kg | 07.22.2020 10:14 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 03:03 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 03:03 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 03:03 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 03:03 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.22.2020 03:03 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-130 | 07.22.2020 03:03 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 1'-1.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-029

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.24.2020 14:27     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 07.24.2020 14:27     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.24.2020 14:27     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-030

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 122    | 4.99 | mg/kg | 07.21.2020 23:57 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 03:24 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 03:24 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 03:24 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 03:24 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 102        | %     | 70-130 | 07.22.2020 03:24 |      |
| o-Terphenyl    | 84-15-1    | 98         | %     | 70-130 | 07.22.2020 03:24 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **AH-9 2'-2.5'**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-030

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.24.2020 14:48     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 07.24.2020 14:48     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 124               | %            | 70-130        | 07.24.2020 14:48     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-1 0-6"**  
Lab Sample Id: 667722-031

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 23.3   | 4.97 | mg/kg | 07.22.2020 00:03 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.22.2020 04:06 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.22.2020 04:06 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.22.2020 04:06 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.22.2020 04:06 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 97         | %     | 70-130 | 07.22.2020 04:06 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-130 | 07.22.2020 04:06 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-1 0-6"**  
Lab Sample Id: 667722-031

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.23.2020 14:30

Basis: Wet Weight

Seq Number: 3132581

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| Toluene       | 108-88-3    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00399 | 0.00399 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |
| Total BTEX    |             | <0.00200 | 0.00200 | mg/kg | 07.24.2020 15:08 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 101        | %     | 70-130 | 07.24.2020 15:08 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 100        | %     | 70-130 | 07.24.2020 15:08 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-2 0-6"**  
Lab Sample Id: 667722-032

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 9.94   | 5.03 | mg/kg | 07.22.2020 00:08 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 04:27 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 04:27 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 04:27 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 04:27 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.22.2020 04:27 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-130 | 07.22.2020 04:27 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-2 0-6"**  
Lab Sample Id: 667722-032

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |
| Toluene       | 108-88-3    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00403 | 0.00403 | mg/kg | 07.23.2020 08:22 | UX   | 1   |
| o-Xylene      | 95-47-6     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |
| Total BTEX    |             | <0.00202 | 0.00202 | mg/kg | 07.23.2020 08:22 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 102        | %     | 70-130 | 07.23.2020 08:22 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 115        | %     | 70-130 | 07.23.2020 08:22 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-3 0-6"**  
Lab Sample Id: 667722-033

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 23.5   | 5.00 | mg/kg | 07.22.2020 00:13 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 04:48 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 04:48 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 04:48 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 04:48 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 93         | %     | 70-130 | 07.22.2020 04:48 |      |
| o-Terphenyl    | 84-15-1    | 90         | %     | 70-130 | 07.22.2020 04:48 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-3 0-6"**  
Lab Sample Id: 667722-033

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 07.23.2020 08:42     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 116               | %            | 70-130        | 07.23.2020 08:42     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 07.23.2020 08:42     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-4 0-6"**  
Lab Sample Id: 667722-034

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 36.8   | 5.00 | mg/kg | 07.22.2020 00:18 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 05:08 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 05:08 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 05:08 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 05:08 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.22.2020 05:08 |      |
| o-Terphenyl    | 84-15-1    | 93         | %     | 70-130 | 07.22.2020 05:08 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-4 0-6"**  
Lab Sample Id: 667722-034

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| Toluene       | 108-88-3    | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00399 | 0.00399 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |
| Total BTEX    |             | <0.00200 | 0.00200 | mg/kg | 07.23.2020 09:03 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 107        | %     | 70-130 | 07.23.2020 09:03 |      |
| 4-Bromofluorobenzene | 460-00-4   | 109        | %     | 70-130 | 07.23.2020 09:03 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-5 0-6"**  
Lab Sample Id: 667722-035

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 9.74   | 5.00 | mg/kg | 07.22.2020 00:23 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 05:29 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 05:29 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 05:29 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 05:29 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 97         | %     | 70-130 | 07.22.2020 05:29 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-130 | 07.22.2020 05:29 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-5 0-6"**  
Lab Sample Id: 667722-035

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 09:23     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 07.23.2020 09:23     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 07.23.2020 09:23     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-6 0-6"**  
Lab Sample Id: 667722-036

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 885    | 5.05 | mg/kg | 07.22.2020 01:26 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 07.22.2020 05:50 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 07.22.2020 05:50 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 07.22.2020 05:50 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 07.22.2020 05:50 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 100        | %     | 70-130 | 07.22.2020 05:50 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-130 | 07.22.2020 05:50 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-6 0-6"**  
Lab Sample Id: 667722-036

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| Toluene       | 108-88-3    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00404 | 0.00404 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |
| Total BTEX    |             | <0.00202 | 0.00202 | mg/kg | 07.23.2020 09:44 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 119        | %     | 70-130 | 07.23.2020 09:44 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 109        | %     | 70-130 | 07.23.2020 09:44 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-7 0-6"**  
Lab Sample Id: 667722-037

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:10

Basis: Wet Weight

Seq Number: 3132280

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 490    | 4.98 | mg/kg | 07.22.2020 01:31 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 06:11 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 06:11 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 06:11 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 06:11 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 100        | %     | 70-130 | 07.22.2020 06:11 |      |
| o-Terphenyl    | 84-15-1    | 99         | %     | 70-130 | 07.22.2020 06:11 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-7 0-6"**  
Lab Sample Id: 667722-037

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 10:04     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 114               | %            | 70-130        | 07.23.2020 10:04     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 07.23.2020 10:04     |             |     |



## Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-8 0-6"**  
 Lab Sample Id: 667722-038

Matrix: Soil  
 Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <4.99  | 4.99 | mg/kg | 07.21.2020 16:48 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.22.2020 06:32 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.22.2020 06:32 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.22.2020 06:32 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.22.2020 06:32 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 93         | %     | 70-130 | 07.22.2020 06:32 |      |
| o-Terphenyl    | 84-15-1    | 90         | %     | 70-130 | 07.22.2020 06:32 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-8 0-6"**  
Lab Sample Id: 667722-038

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| Toluene       | 108-88-3    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00403 | 0.00403 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |
| Total BTEX    |             | <0.00202 | 0.00202 | mg/kg | 07.23.2020 12:49 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 4-Bromofluorobenzene | 460-00-4   | 86         | %     | 70-130 | 07.23.2020 12:49 |      |
| 1,4-Difluorobenzene  | 540-36-3   | 114        | %     | 70-130 | 07.23.2020 12:49 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-9 0-6"**  
Lab Sample Id: 667722-039

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 103    | 5.00 | mg/kg | 07.21.2020 17:06 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 06:53 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 06:53 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 06:53 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 06:53 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 94         | %     | 70-130 | 07.22.2020 06:53 |      |
| o-Terphenyl    | 84-15-1    | 90         | %     | 70-130 | 07.22.2020 06:53 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-9 0-6"**  
Lab Sample Id: 667722-039

Matrix: Soil  
Date Collected: 07.20.2020 00:00

Date Received: 07.21.2020 09:39

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 07.23.2020 13:10     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 98                | %            | 70-130        | 07.23.2020 13:10     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 116               | %            | 70-130        | 07.23.2020 13:10     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-10 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-040

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <4.96  | 4.96 | mg/kg | 07.21.2020 17:13 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 13:00

Basis: Wet Weight

Seq Number: 3132292

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.22.2020 07:13 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.22.2020 07:13 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.22.2020 07:13 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.22.2020 07:13 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 92         | %     | 70-130 | 07.22.2020 07:13 |      |
| o-Terphenyl    | 84-15-1    | 90         | %     | 70-130 | 07.22.2020 07:13 |      |





# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-10 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-040

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:30     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 07.23.2020 13:30     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 116               | %            | 70-130        | 07.23.2020 13:30     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-11 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-041

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <4.98  | 4.98 | mg/kg | 07.21.2020 17:19 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132286

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 21:02 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:02 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 94         | %     | 70-130 | 07.21.2020 21:02 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-130 | 07.21.2020 21:02 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-11 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-041

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 07.23.2020 13:51     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 113               | %            | 70-130        | 07.23.2020 13:51     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 105               | %            | 70-130        | 07.23.2020 13:51     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-12 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-042

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <5.04  | 5.04 | mg/kg | 07.21.2020 17:25 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132286

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 07.21.2020 21:24 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 87         | %     | 70-130 | 07.21.2020 21:24 |      |
| o-Terphenyl    | 84-15-1    | 84         | %     | 70-130 | 07.21.2020 21:24 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-12 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-042

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 07.23.2020 14:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 106               | %            | 70-130        | 07.23.2020 14:11     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 111               | %            | 70-130        | 07.23.2020 14:11     |             |     |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-13 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-043

Date Collected: 07.20.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 07.21.2020 15:30

Basis: Wet Weight

Seq Number: 3132264

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | <4.97  | 4.97 | mg/kg | 07.21.2020 17:43 | U    | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

% Moisture:

Analyst: ARM

Date Prep: 07.21.2020 12:00

Basis: Wet Weight

Seq Number: 3132286

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 07.21.2020 21:45 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-130 | 07.21.2020 21:45 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-130 | 07.21.2020 21:45 |      |



# Certificate of Analytical Results 667722

## Tetra Tech- Midland, Midland, TX

Caballo Riser 1

Sample Id: **H-13 0-6"**

Matrix: Soil

Date Received: 07.21.2020 09:39

Lab Sample Id: 667722-043

Date Collected: 07.20.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

% Moisture:

Analyst: KTL

Date Prep: 07.21.2020 09:00

Basis: Wet Weight

Seq Number: 3132458

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| Toluene       | 108-88-3    | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00401 | 0.00401 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |
| Total BTEX    |             | <0.00200 | 0.00200 | mg/kg | 07.23.2020 14:32 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 107        | %     | 70-130 | 07.23.2020 14:32 |      |
| 4-Bromofluorobenzene | 460-00-4   | 108        | %     | 70-130 | 07.23.2020 14:32 |      |

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.      **ND** Not Detected.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK** Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS** Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation





### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132250

Matrix: Solid

Prep Method: E300P

Date Prep: 07.21.2020

MB Sample Id: 7707767-1-BLK

LCS Sample Id: 7707767-1-BKS

LCSD Sample Id: 7707767-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 251        | 100      | 252         | 101       | 90-110 | 0    | 20        | mg/kg | 07.21.2020 13:07 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132280

Matrix: Solid

Prep Method: E300P

Date Prep: 07.21.2020

MB Sample Id: 7707769-1-BLK

LCS Sample Id: 7707769-1-BKS

LCSD Sample Id: 7707769-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 262        | 105      | 261         | 104       | 90-110 | 0    | 20        | mg/kg | 07.21.2020 23:00 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132264

Matrix: Solid

Prep Method: E300P

Date Prep: 07.21.2020

MB Sample Id: 7707770-1-BLK

LCS Sample Id: 7707770-1-BKS

LCSD Sample Id: 7707770-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 270        | 108      | 270         | 108       | 90-110 | 0    | 20        | mg/kg | 07.21.2020 16:36 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132250

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667721-001

MS Sample Id: 667721-001 S

MSD Sample Id: 667721-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <4.95         | 248          | 262       | 106     | 262        | 106      | 90-110 | 0    | 20        | mg/kg | 07.21.2020 13:25 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132250

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667722-008

MS Sample Id: 667722-008 S

MSD Sample Id: 667722-008 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 5.96          | 249          | 267       | 105     | 267        | 105      | 90-110 | 0    | 20        | mg/kg | 07.21.2020 14:51 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132280

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667722-018

MS Sample Id: 667722-018 S

MSD Sample Id: 667722-018 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 2370          | 1250         | 3990      | 130     | 3760       | 111      | 90-110 | 6    | 20        | mg/kg | 07.21.2020 23:16 | X    |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132280

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667722-028

MS Sample Id: 667722-028 S

MSD Sample Id: 667722-028 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 20.5          | 250          | 283       | 105     | 287        | 107      | 90-110 | 1    | 20        | mg/kg | 07.22.2020 10:04 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132264

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667722-038

MS Sample Id: 667722-038 S

MSD Sample Id: 667722-038 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <4.99         | 250          | 263       | 105     | 263        | 105      | 90-110 | 0    | 20        | mg/kg | 07.21.2020 16:54 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3132264

Matrix: Soil

Prep Method: E300P

Date Prep: 07.21.2020

Parent Sample Id: 667723-005

MS Sample Id: 667723-005 S

MSD Sample Id: 667723-005 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 1630          | 1260         | 2930      | 103     | 2930       | 103      | 90-110 | 0    | 20        | mg/kg | 07.21.2020 18:20 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132286

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.21.2020

MB Sample Id: 7707788-1-BLK

LCS Sample Id: 7707788-1-BKS

LCSD Sample Id: 7707788-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 905        | 91       | 888         | 89        | 70-130 | 2    | 20        | mg/kg | 07.21.2020 13:08 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 911        | 91       | 930         | 93        | 70-130 | 2    | 20        | mg/kg | 07.21.2020 13:08 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 106     |         | 95       |          | 105       |           | 70-130 | %     | 07.21.2020 13:08 |
| o-Terphenyl    | 106     |         | 91       |          | 100       |           | 70-130 | %     | 07.21.2020 13:08 |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132291

Matrix: Solid

Prep Method: SW8015P

Date Prep: 07.21.2020

MB Sample Id: 7707789-1-BLK

LCS Sample Id: 7707789-1-BKS

LCSD Sample Id: 7707789-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 891        | 89       | 899         | 90        | 70-130 | 1    | 20        | mg/kg | 07.21.2020 13:08 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 915        | 92       | 910         | 91        | 70-130 | 1    | 20        | mg/kg | 07.21.2020 13:08 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 105     |         | 105      |          | 101       |           | 70-130 | %     | 07.21.2020 13:08 |
| o-Terphenyl    | 100     |         | 94       |          | 92        |           | 70-130 | %     | 07.21.2020 13:08 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132292

MB Sample Id: 7707790-1-BLK

Matrix: Solid

LCS Sample Id: 7707790-1-BKS

Prep Method: SW8015P

Date Prep: 07.21.2020

LCSD Sample Id: 7707790-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 903        | 90       | 900         | 90        | 70-130 | 0    | 20        | mg/kg | 07.21.2020 22:49 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 947        | 95       | 949         | 95        | 70-130 | 0    | 20        | mg/kg | 07.21.2020 22:49 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 109     |         | 107      |          | 108       |           | 70-130 | %     | 07.21.2020 22:49 |
| o-Terphenyl    | 101     |         | 95       |          | 95        |           | 70-130 | %     | 07.21.2020 22:49 |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132286

Matrix: Solid

MB Sample Id: 7707788-1-BLK

Prep Method: SW8015P

Date Prep: 07.21.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 07.21.2020 12:46 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132291

Matrix: Solid

MB Sample Id: 7707789-1-BLK

Prep Method: SW8015P

Date Prep: 07.21.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 07.21.2020 12:46 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132292

Matrix: Solid

MB Sample Id: 7707790-1-BLK

Prep Method: SW8015P

Date Prep: 07.21.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 07.21.2020 22:28 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3132286

Matrix: Soil

Parent Sample Id: 667723-001

MS Sample Id: 667723-001 S

Prep Method: SW8015P

Date Prep: 07.21.2020

MSD Sample Id: 667723-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 997          | 852       | 85      | 869        | 87       | 70-130 | 2    | 20        | mg/kg | 07.21.2020 14:12 |      |
| Diesel Range Organics (DRO)       | <49.9         | 997          | 896       | 90      | 924        | 92       | 70-130 | 3    | 20        | mg/kg | 07.21.2020 14:12 |      |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 109     |         | 111      |          | 70-130 | %     | 07.21.2020 14:12 |
| o-Terphenyl    | 104     |         | 107      |          | 70-130 | %     | 07.21.2020 14:12 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec

## Tetra Tech- Midland

## Caballo Riser 1

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3132291

Parent Sample Id: 667722-001

Matrix: Soil

MS Sample Id: 667722-001 S

Prep Method: SW8015P

Date Prep: 07.21.2020

MSD Sample Id: 667722-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 998          | 916       | 92      | 916        | 92       | 70-130 | 0    | 20        | mg/kg | 07.21.2020 14:12 |      |
| Diesel Range Organics (DRO)       | <49.9         | 998          | 914       | 92      | 919        | 92       | 70-130 | 1    | 20        | mg/kg | 07.21.2020 14:12 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 106     |         | 108      |          | 70-130 | %     | 07.21.2020 14:12 |
| o-Terphenyl    | 94      |         | 95       |          | 70-130 | %     | 07.21.2020 14:12 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3132292

Parent Sample Id: 667722-021

Matrix: Soil

MS Sample Id: 667722-021 S

Prep Method: SW8015P

Date Prep: 07.21.2020

MSD Sample Id: 667722-021 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 997          | 890       | 89      | 922        | 92       | 70-130 | 4    | 20        | mg/kg | 07.21.2020 23:53 |      |
| Diesel Range Organics (DRO)       | <49.9         | 997          | 834       | 84      | 934        | 93       | 70-130 | 11   | 20        | mg/kg | 07.21.2020 23:53 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 111     |         | 109      |          | 70-130 | %     | 07.21.2020 23:53 |
| o-Terphenyl    | 101     |         | 102      |          | 70-130 | %     | 07.21.2020 23:53 |

## Analytical Method: BTEX by EPA 8021B

Seq Number: 3132458

MB Sample Id: 7707950-1-BLK

Matrix: Solid

LCS Sample Id: 7707950-1-BKS

Prep Method: SW5035A

Date Prep: 07.21.2020

LCSD Sample Id: 7707950-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.105      | 105      | 0.103       | 103       | 70-130 | 2    | 35        | mg/kg | 07.23.2020 06:19 |      |
| Toluene      | <0.00200  | 0.100        | 0.0974     | 97       | 0.0965      | 97        | 70-130 | 1    | 35        | mg/kg | 07.23.2020 06:19 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0933     | 93       | 0.0919      | 92        | 70-130 | 2    | 35        | mg/kg | 07.23.2020 06:19 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.179      | 90       | 0.179       | 90        | 70-130 | 0    | 35        | mg/kg | 07.23.2020 06:19 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0894     | 89       | 0.0901      | 90        | 70-130 | 1    | 35        | mg/kg | 07.23.2020 06:19 |      |

## Surrogate

|                      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 108     |         | 102      |          | 100       |           | 70-130 | %     | 07.23.2020 06:19 |
| 4-Bromofluorobenzene | 100     |         | 103      |          | 103       |           | 70-130 | %     | 07.23.2020 06:19 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132392

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.22.2020

MB Sample Id: 7707882-1-BLK

LCS Sample Id: 7707882-1-BKS

LCSD Sample Id: 7707882-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0977     | 98       | 0.0959      | 96        | 70-130 | 2    | 35        | mg/kg | 07.22.2020 13:54 |      |
| Toluene      | <0.00200  | 0.100        | 0.0984     | 98       | 0.0976      | 98        | 70-130 | 1    | 35        | mg/kg | 07.22.2020 13:54 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0965     | 97       | 0.0959      | 96        | 70-130 | 1    | 35        | mg/kg | 07.22.2020 13:54 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.196      | 98       | 0.195       | 98        | 70-130 | 1    | 35        | mg/kg | 07.22.2020 13:54 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0951     | 95       | 0.0952      | 95        | 70-130 | 0    | 35        | mg/kg | 07.22.2020 13:54 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 100     |         | 97       |          | 97        |           | 70-130 | %     | 07.22.2020 13:54 |
| 4-Bromofluorobenzene | 99      |         | 100      |          | 101       |           | 70-130 | %     | 07.22.2020 13:54 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132446

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.22.2020

MB Sample Id: 7707928-1-BLK

LCS Sample Id: 7707928-1-BKS

LCSD Sample Id: 7707928-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.111      | 111      | 0.111       | 111       | 70-130 | 0    | 35        | mg/kg | 07.23.2020 07:57 |      |
| Toluene      | <0.00200  | 0.100        | 0.110      | 110      | 0.111       | 111       | 70-130 | 1    | 35        | mg/kg | 07.23.2020 07:57 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.106      | 106      | 0.106       | 106       | 70-130 | 0    | 35        | mg/kg | 07.23.2020 07:57 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.214      | 107      | 0.213       | 107       | 70-130 | 0    | 35        | mg/kg | 07.23.2020 07:57 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.101      | 101      | 0.101       | 101       | 70-130 | 0    | 35        | mg/kg | 07.23.2020 07:57 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 78      |         | 102      |          | 97        |           | 70-130 | %     | 07.23.2020 07:57 |
| 4-Bromofluorobenzene | 108     |         | 120      |          | 116       |           | 70-130 | %     | 07.23.2020 07:57 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132581

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.23.2020

MB Sample Id: 7707988-1-BLK

LCS Sample Id: 7707988-1-BKS

LCSD Sample Id: 7707988-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.101      | 101      | 0.0921      | 92        | 70-130 | 9    | 35        | mg/kg | 07.24.2020 10:00 |      |
| Toluene      | <0.00200  | 0.100        | 0.0985     | 99       | 0.0909      | 91        | 70-130 | 8    | 35        | mg/kg | 07.24.2020 10:00 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0969     | 97       | 0.0912      | 91        | 70-130 | 6    | 35        | mg/kg | 07.24.2020 10:00 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.192      | 96       | 0.184       | 92        | 70-130 | 4    | 35        | mg/kg | 07.24.2020 10:00 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0967     | 97       | 0.0916      | 92        | 70-130 | 5    | 35        | mg/kg | 07.24.2020 10:00 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 100     |         | 99       |          | 99        |           | 70-130 | %     | 07.24.2020 10:00 |
| 4-Bromofluorobenzene | 99      |         | 102      |          | 101       |           | 70-130 | %     | 07.24.2020 10:00 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132552

Matrix: Solid

Prep Method: SW5035A

Date Prep: 07.23.2020

MB Sample Id: 7707987-1-BLK

LCS Sample Id: 7707987-1-BKS

LCSD Sample Id: 7707987-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.113      | 113      | 0.115       | 115       | 70-130 | 2    | 35        | mg/kg | 07.24.2020 09:32 |      |
| Toluene      | <0.00200  | 0.100        | 0.109      | 109      | 0.108       | 108       | 70-130 | 1    | 35        | mg/kg | 07.24.2020 09:32 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.108      | 108      | 0.107       | 107       | 70-130 | 1    | 35        | mg/kg | 07.24.2020 09:32 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.209      | 105      | 0.207       | 104       | 70-130 | 1    | 35        | mg/kg | 07.24.2020 09:32 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0992     | 99       | 0.0986      | 99        | 70-130 | 1    | 35        | mg/kg | 07.24.2020 09:32 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 106     |         | 93       |          | 99        |           | 70-130 | %     | 07.24.2020 09:32 |
| 4-Bromofluorobenzene | 102     |         | 94       |          | 101       |           | 70-130 | %     | 07.24.2020 09:32 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132458

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.21.2020

Parent Sample Id: 667722-032

MS Sample Id: 667722-032 S

MSD Sample Id: 667722-032 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0887    | 89      | 0.0743     | 75       | 70-130 | 18   | 35        | mg/kg | 07.23.2020 07:00 |      |
| Toluene      | <0.00200      | 0.0998       | 0.0824    | 83      | 0.0724     | 73       | 70-130 | 13   | 35        | mg/kg | 07.23.2020 07:00 |      |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0779    | 78      | 0.0701     | 70       | 70-130 | 11   | 35        | mg/kg | 07.23.2020 07:00 |      |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.150     | 75      | 0.137      | 69       | 70-130 | 9    | 35        | mg/kg | 07.23.2020 07:00 | X    |
| o-Xylene     | <0.00200      | 0.0998       | 0.0754    | 76      | 0.0698     | 70       | 70-130 | 8    | 35        | mg/kg | 07.23.2020 07:00 |      |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 101     |         | 100      |          | 70-130 | %     | 07.23.2020 07:00 |
| 4-Bromofluorobenzene | 104     |         | 104      |          | 70-130 | %     | 07.23.2020 07:00 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132392

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.22.2020

Parent Sample Id: 667722-012

MS Sample Id: 667722-012 S

MSD Sample Id: 667722-012 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0935    | 94      | 0.0912     | 91       | 70-130 | 2    | 35        | mg/kg | 07.22.2020 14:35 |      |
| Toluene      | <0.00200      | 0.0998       | 0.0944    | 95      | 0.0908     | 91       | 70-130 | 4    | 35        | mg/kg | 07.22.2020 14:35 |      |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0931    | 93      | 0.0910     | 91       | 70-130 | 2    | 35        | mg/kg | 07.22.2020 14:35 |      |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.188     | 94      | 0.184      | 92       | 70-130 | 2    | 35        | mg/kg | 07.22.2020 14:35 |      |
| o-Xylene     | <0.00200      | 0.0998       | 0.0919    | 92      | 0.0902     | 90       | 70-130 | 2    | 35        | mg/kg | 07.22.2020 14:35 |      |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 98      |         | 97       |          | 70-130 | %     | 07.22.2020 14:35 |
| 4-Bromofluorobenzene | 101     |         | 101      |          | 70-130 | %     | 07.22.2020 14:35 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser 1

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132446

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.22.2020

Parent Sample Id: 667721-001

MS Sample Id: 667721-001 S

MSD Sample Id: 667721-001 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0892    | 89      | 0.0852     | 86       | 70-130 | 5    | 35        | mg/kg | 07.23.2020 08:37 |      |
| Toluene      | <0.00200      | 0.0998       | 0.0660    | 66      | 0.0639     | 64       | 70-130 | 3    | 35        | mg/kg | 07.23.2020 08:37 | X    |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0712    | 71      | 0.0696     | 70       | 70-130 | 2    | 35        | mg/kg | 07.23.2020 08:37 |      |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.129     | 65      | 0.124      | 62       | 70-130 | 4    | 35        | mg/kg | 07.23.2020 08:37 | X    |
| o-Xylene     | <0.00200      | 0.0998       | 0.0750    | 75      | 0.0744     | 75       | 70-130 | 1    | 35        | mg/kg | 07.23.2020 08:37 |      |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 96      |         | 99       |          | 70-130 | %     | 07.23.2020 08:37 |
| 4-Bromofluorobenzene | 119     |         | 126      |          | 70-130 | %     | 07.23.2020 08:37 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132581

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.23.2020

Parent Sample Id: 667722-028

MS Sample Id: 667722-028 S

MSD Sample Id: 667722-028 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00199      | 0.0994       | 0.0295    | 30      | 0.0579     | 57       | 70-130 | 65   | 35        | mg/kg | 07.24.2020 10:41 | XF   |
| Toluene      | <0.00199      | 0.0994       | 0.0301    | 30      | 0.0557     | 55       | 70-130 | 60   | 35        | mg/kg | 07.24.2020 10:41 | XF   |
| Ethylbenzene | <0.00199      | 0.0994       | 0.0328    | 33      | 0.0552     | 55       | 70-130 | 51   | 35        | mg/kg | 07.24.2020 10:41 | XF   |
| m,p-Xylenes  | <0.00398      | 0.199        | 0.0658    | 33      | 0.108      | 54       | 70-130 | 49   | 35        | mg/kg | 07.24.2020 10:41 | XF   |
| o-Xylene     | <0.00199      | 0.0994       | 0.0373    | 38      | 0.0561     | 56       | 70-130 | 40   | 35        | mg/kg | 07.24.2020 10:41 | XF   |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 98      |         | 98       |          | 70-130 | %     | 07.24.2020 10:41 |
| 4-Bromofluorobenzene | 109     |         | 101      |          | 70-130 | %     | 07.24.2020 10:41 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3132552

Matrix: Soil

Prep Method: SW5035A

Date Prep: 07.23.2020

Parent Sample Id: 667249-001

MS Sample Id: 667249-001 S

MSD Sample Id: 667249-001 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00198      | 0.0990       | 0.0835    | 84      | 0.0822     | 83       | 70-130 | 2    | 35        | mg/kg | 07.23.2020 18:04 |      |
| Toluene      | <0.00198      | 0.0990       | 0.0696    | 70      | 0.0685     | 69       | 70-130 | 2    | 35        | mg/kg | 07.23.2020 18:04 | X    |
| Ethylbenzene | <0.00198      | 0.0990       | 0.0601    | 61      | 0.0580     | 58       | 70-130 | 4    | 35        | mg/kg | 07.23.2020 18:04 | X    |
| m,p-Xylenes  | <0.00396      | 0.198        | 0.115     | 58      | 0.111      | 56       | 70-130 | 4    | 35        | mg/kg | 07.23.2020 18:04 | X    |
| o-Xylene     | <0.00198      | 0.0990       | 0.0584    | 59      | 0.0567     | 57       | 70-130 | 3    | 35        | mg/kg | 07.23.2020 18:04 | X    |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 102     |         | 103      |          | 70-130 | %     | 07.23.2020 18:04 |
| 4-Bromofluorobenzene | 99      |         | 102      |          | 70-130 | %     | 07.23.2020 18:04 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



## Analysis Request of Custody Record

Page 1 of 5



Tetra Tech, Inc.

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

1007722

|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser 1            |  | Project #:                         |  |
| Project Location: Lea County, New Mexico |  | Project #:                         |  |
| Invoice to: Galan Kelley                 |  | Sampler Signature: Devin Dominguez |  |
| Receiving Laboratory: Xenco              |  | Comments:                          |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  | # CONTAINERS | FILTERED (Y/N) |     |      |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|--------------|----------------|-----|------|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> |              |                | ICE | None |
|                         |                       |           |      |        |      |                     |                  |              |                |     |      |
|                         | AH-1 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-1 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-1 2'-2.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-1 3'-3.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-2 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-2 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-2 2'-2.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-2 3'-3.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-3 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |
|                         | AH-3 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              |     |      |

| LAB USE ONLY                                                   | REMARKS: |
|----------------------------------------------------------------|----------|
| <input type="checkbox"/> STANDARD                              |          |
| <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr |          |
| <input type="checkbox"/> Rush Charges Authorized               |          |
| <input type="checkbox"/> Special Report Limits or TRRP Report  |          |

(Circle or Specify Method No.)

ANALYSIS REQUEST

 BTX 8021B BTX 8260B  
 TPH TX1005 (Ext to C35)  
 TPH 8015M ( GRO - DRO - ORO - MRO)  
 PAH 8270C  
 Total Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Volatiles  
 TCLP Semi Volatiles  
 RCI  
 GC/MS Vol. 8260B / 624  
 GC/MS Semi. Vol. 8270C/625  
 PCB's 8082 / 608  
 NORM  
 PLM (Asbestos)  
 Chloride  
 Chloride Sulfate TDS  
 General Water Chemistry (see attached list)  
 Anion/Cation Balance  
 TPH 8015R

Hold

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(Circle) HAND DELIVERED FEDEX UPS Tracking #

2.3/1.9

Sample Temperature

LAB USE ONLY

REMARKS:

☐ STANDARD☒ RUSH: Same Day 24 hr 48 hr☐ Rush Charges Authorized☐ Special Report Limits or TRRP Report



## Analysis Request of Custody Record

Page 2 of 5



## Tetra Tech, Inc.

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

Mike Carmona

## ANALYSIS REQUEST

447722

Client Name: EOG  
Project Name: Caballo Riser 1  
Site Manager: Mike Carmona

Project Location: Lea County, New Mexico  
Project #:

Invoice to: Galan Kelley

Receiving Laboratory: Xenco  
Sampler Signature: Devin Dominguez

Comments:

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  | # CONTAINERS | FILTERED (Y/N) | LAB USE ONLY | REMARKS: |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|--------------|----------------|--------------|----------|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> |              |                |              |          |
|                         | AH-3 2'-2.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-4 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-4 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-4 2'-2.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-4 3'-3.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-5 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-5 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-5 2'-2.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-6 0-1'             | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |
|                         | AH-6 1'-1.5'          | 7/20/2020 |      | X      |      | X                   |                  | 1            | N              | X            |          |

(Circle or Specify Method No.)

LAB USE ONLY

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature

231.9

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## Analysis Request of Chain of Custody Record

Page 3 of 5



Tetra Tech, Inc.

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

Client Name: EOG

Site Manager:

Mike Carmona

Project Name:

Caballo Riser 1

Project Location:

Lea County, New Mexico

Project #:

Invoice to:

Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

Devin Dominguez

Comments:

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING   |  | DATE      | TIME | MATRIX | PRESERVATIVE METHOD |      |     |                  |     | # CONTAINERS | FILTERED (Y/N) |      |
|-------------------------|-----------------------|------------|--|-----------|------|--------|---------------------|------|-----|------------------|-----|--------------|----------------|------|
|                         |                       | YEAR: 2020 |  |           |      |        | WATER               | SOIL | HCL | HNO <sub>3</sub> | ICE |              |                | None |
|                         |                       |            |  |           |      |        |                     |      |     |                  |     |              |                |      |
|                         | AH-6 2-2.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-7 0-1'             |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-7 1-1.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-7 2-2.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-8 0-1'             |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-8 1-1.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-8 2-2.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-9 0-1'             |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-9 1-1.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |
|                         | AH-9 2-2.5'           |            |  | 7/20/2020 |      | X      |                     |      |     | X                |     |              | 1              | N    |

 ANALYSIS REQUEST  
 (Circle or Specify Method No.)

| LAB USE ONLY                                                  | REMARKS: |
|---------------------------------------------------------------|----------|
| <input type="checkbox"/> STANDARD                             |          |
| <input checked="" type="checkbox"/> RUSH: Same Day 24 hr      |          |
| <input type="checkbox"/> Rush Charges Authorized              |          |
| <input type="checkbox"/> Special Report Limits or TRRP Report |          |

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## Analysis Request of Chain of Custody Record



# Tetra Tech, Inc.

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

Page 4 of 5

|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser 1            |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #:                         |  |
| Invoice to: Galan Kelley                 |  |                                    |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: Devin Dominguez |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) |   |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|---|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |   |
|                         |                       |           |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |   |
|                         | H-1 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-2 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-3 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-4 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-5 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-6 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-7 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-8 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-9 0-6"              | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |
|                         | H-10 0-6"             | 7/20/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N |

|                  |            |       |              |            |           |
|------------------|------------|-------|--------------|------------|-----------|
| Relinquished by: | Date: 7/21 | Time: | Received by: | Date: 7/21 | Time: 939 |
| Relinquished by: | Date:      | Time: | Received by: | Date:      | Time:     |

|                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LAB USE ONLY                                                                                                                                                                                                                          | REMARKS:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <input type="checkbox"/> STANDARD<br><input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr <u>72 hr</u><br><input type="checkbox"/> Rush Charges Authorized<br><input type="checkbox"/> Special Report Limits or TRRP Report | ANALYSIS REQUEST<br>(Circle or Specify Method No.)<br>BTEX 8021B BTEX 8260B<br>TPH TX1005 (Ext to C35)<br>TPH 8015M ( GRO - DRO - ORO - MRO)<br>PAH 8270C<br>Total Metals Ag As Ba Cd Cr Pb Se Hg<br>TCLP Metals Ag As Ba Cd Cr Pb Se Hg<br>TCLP Volatiles<br>TCLP Semi Volatiles<br>RCI<br>GC/MS Vol. 8260B / 624<br>GC/MS Semi. Vol. 8270C/625<br>PCB's 8082 / 608<br>NORM<br>PLM (Asbestos)<br>Chloride<br>Chloride Sulfate TDS<br>General Water Chemistry (see attached list)<br>Anion/Cation Balance<br>TPH 8015R<br>Hold |

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# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 07.21.2020 09.39.00 AM

Work Order #: 667722

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

| Sample Receipt Checklist                                | Comments                       |
|---------------------------------------------------------|--------------------------------|
| #1 *Temperature of cooler(s)?                           | 1.9                            |
| #2 *Shipping container in good condition?               | Yes                            |
| #3 *Samples received on ice?                            | Yes                            |
| #4 *Custody Seals intact on shipping container/ cooler? | N/A                            |
| #5 Custody Seals intact on sample bottles?              | N/A                            |
| #6 *Custody Seals Signed and dated?                     | N/A                            |
| #7 *Chain of Custody present?                           | Yes                            |
| #8 Any missing/extra samples?                           | No                             |
| #9 Chain of Custody signed when relinquished/ received? | Yes                            |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes                            |
| #11 Container label(s) legible and intact?              | Yes                            |
| #12 Samples in proper container/ bottle?                | Yes BTEX was in bulk container |
| #13 Samples properly preserved?                         | Yes                            |
| #14 Sample container(s) intact?                         | Yes                            |
| #15 Sufficient sample amount for indicated test(s)?     | Yes                            |
| #16 All samples received within hold time?              | Yes                            |
| #17 Subcontract of sample(s)?                           | N/A                            |
| #18 Water VOC samples have zero headspace?              | N/A                            |

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 07.21.2020

Checklist reviewed by:



Jessica Kramer

Date: 07.21.2020

## Certificate of Analysis Summary 669943



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 21C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu 08.13.2020 09:56  
**Report Date:** 08.17.2020 11:27  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 669943-001       | 669943-002       | 669943-003       | 669943-004       | 669943-005       | 669943-006       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | Trench 1 (0-1')  | Trench 1 (1')    | Trench 1 (2')    | Trench 1 (3')    | Trench 1 (4')    | Trench 1 (5')    |
|                                          | <i>Depth:</i>     | 0-1 ft           | 1- ft            | 2- ft            | 3- ft            | 4- ft            | 5- ft            |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 08.13.2020 10:09 |                  |                  |                  |                  |                  |
|                                          | <i>Analyzed:</i>  | 08.13.2020 22:00 |                  |                  |                  |                  |                  |
|                                          | <i>Units/RL:</i>  | mg/kg RL         |                  |                  |                  |                  |                  |
| Benzene                                  |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| Toluene                                  |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| Ethylbenzene                             |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| m,p-Xylenes                              |                   | <0.00398 0.00398 |                  |                  |                  |                  |                  |
| o-Xylene                                 |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| Total Xylenes                            |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| Total BTEX                               |                   | <0.00199 0.00199 |                  |                  |                  |                  |                  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | *** ** *         | *** ** *         | *** ** *         | *** ** *         | *** ** *         | *** ** *         |
|                                          | <i>Analyzed:</i>  | 08.13.2020 14:51 | 08.13.2020 15:08 | 08.13.2020 15:13 | 08.13.2020 15:19 | 08.13.2020 15:25 | 08.13.2020 15:41 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 698 10.0         | 906 9.92         | 1890 49.9        | 5990 50.1        | 1910 50.1        | 77.5 9.98        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 08.13.2020 17:10 |                  |                  |                  |                  |                  |
|                                          | <i>Analyzed:</i>  | 08.14.2020 10:04 |                  |                  |                  |                  |                  |
|                                          | <i>Units/RL:</i>  | mg/kg RL         |                  |                  |                  |                  |                  |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0       |                  |                  |                  |                  |                  |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0       |                  |                  |                  |                  |                  |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0       |                  |                  |                  |                  |                  |
| Total TPH                                |                   | <50.0 50.0       |                  |                  |                  |                  |                  |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 669943



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 21C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu 08.13.2020 09:56  
**Report Date:** 08.17.2020 11:27  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 669943-007       | 669943-008       | 669943-009       | 669943-010       | 669943-011       | 669943-012       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | Trench 1 (6')    | Trench 2 (0-1')  | Trench 2 (1')    | Trench 2 (2')    | Trench 2 (3')    | Trench 2 (4')    |
|                                          | <i>Depth:</i>     | 6- ft            | 0-1 ft           | 1- ft            | 2- ft            | 3- ft            | 4- ft            |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> |                  | 08.13.2020 10:09 |                  |                  |                  |                  |
|                                          | <i>Analyzed:</i>  |                  | 08.13.2020 22:20 |                  |                  |                  |                  |
|                                          | <i>Units/RL:</i>  |                  | mg/kg RL         |                  |                  |                  |                  |
| Benzene                                  |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| Toluene                                  |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| Ethylbenzene                             |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| m,p-Xylenes                              |                   |                  | <0.00401 0.00401 |                  |                  |                  |                  |
| o-Xylene                                 |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| Total Xylenes                            |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| Total BTEX                               |                   |                  | <0.00200 0.00200 |                  |                  |                  |                  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | *****            | *****            | *****            | *****            | *****            | *****            |
|                                          | <i>Analyzed:</i>  | 08.13.2020 15:47 | 08.13.2020 15:53 | 08.13.2020 15:58 | 08.13.2020 16:04 | 08.13.2020 16:09 | 08.13.2020 16:26 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 12.9 9.92        | 96.4 9.98        | 75.3 10.0        | 389 10.1         | 7020 49.6        | 6070 49.8        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> |                  | 08.13.2020 17:10 |                  |                  |                  |                  |
|                                          | <i>Analyzed:</i>  |                  | 08.13.2020 21:53 |                  |                  |                  |                  |
|                                          | <i>Units/RL:</i>  |                  | mg/kg RL         |                  |                  |                  |                  |
| Gasoline Range Hydrocarbons (GRO)        |                   |                  | <49.9 49.9       |                  |                  |                  |                  |
| Diesel Range Organics (DRO)              |                   |                  | <49.9 49.9       |                  |                  |                  |                  |
| Motor Oil Range Hydrocarbons (MRO)       |                   |                  | <49.9 49.9       |                  |                  |                  |                  |
| Total TPH                                |                   |                  | <49.9 49.9       |                  |                  |                  |                  |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 669943



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 21C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu 08.13.2020 09:56  
**Report Date:** 08.17.2020 11:27  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 669943-013       | 669943-014       | 669943-015       | 669943-016       | 669943-017       | 669943-018       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | Trench 2 (5')    | Trench 2 (6')    | Trench 2 (7')    | Trench 2 (8')    | Trench 3 (0-1')  | Trench 3 (1')    |
|                                          | <i>Depth:</i>     | 5- ft            | 6- ft            | 7- ft            | 8- ft            | 0-1 ft           | 1- ft            |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> |                  |                  |                  |                  | 08.14.2020 08:47 |                  |
|                                          | <i>Analyzed:</i>  |                  |                  |                  |                  | 08.14.2020 23:45 |                  |
|                                          | <i>Units/RL:</i>  |                  |                  |                  |                  | mg/kg RL         |                  |
| Benzene                                  |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| Toluene                                  |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| Ethylbenzene                             |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| m,p-Xylenes                              |                   |                  |                  |                  |                  | <0.00402 0.00402 |                  |
| o-Xylene                                 |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| Total Xylenes                            |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| Total BTEX                               |                   |                  |                  |                  |                  | <0.00201 0.00201 |                  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | *****            | *****            | *****            | *****            | *****            | *****            |
|                                          | <i>Analyzed:</i>  | 08.13.2020 16:31 | 08.13.2020 16:48 | 08.13.2020 16:54 | 08.13.2020 16:59 | 08.13.2020 17:05 | 08.13.2020 17:11 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 4650 50.2        | 1640 50.3        | 396 50.4         | 42.3 10.0        | 73.2 10.1        | 171 10.0         |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> |                  |                  |                  |                  | 08.13.2020 17:10 |                  |
|                                          | <i>Analyzed:</i>  |                  |                  |                  |                  | 08.13.2020 22:14 |                  |
|                                          | <i>Units/RL:</i>  |                  |                  |                  |                  | mg/kg RL         |                  |
| Gasoline Range Hydrocarbons (GRO)        |                   |                  |                  |                  |                  | <49.8 49.8       |                  |
| Diesel Range Organics (DRO)              |                   |                  |                  |                  |                  | <49.8 49.8       |                  |
| Motor Oil Range Hydrocarbons (MRO)       |                   |                  |                  |                  |                  | <49.8 49.8       |                  |
| Total TPH                                |                   |                  |                  |                  |                  | <49.8 49.8       |                  |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 669943



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 21C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu 08.13.2020 09:56**Report Date:** 08.17.2020 11:27**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>         | <i>Lab Id:</i>    | 669943-019       | 669943-020       | 669943-021       | 669943-022       | 669943-023       | 669943-024       |
|-----------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                   | <i>Field Id:</i>  | Trench 3 (2')    | Trench 3 (3')    | Trench 3 (4')    | Trench 3 (5')    | Trench 3 (6')    | Trench 3 (7')    |
|                                   | <i>Depth:</i>     | 2- ft            | 3- ft            | 4- ft            | 5- ft            | 6- ft            | 7- ft            |
|                                   | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                   | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |
| Inorganic Anions by EPA 300/300.1 | <i>Extracted:</i> | *** ** *         | *** ** *         | *** ** *         | *** ** *         | *** ** *         | *** ** *         |
|                                   | <i>Analyzed:</i>  | 08.13.2020 17:16 | 08.13.2020 17:22 | 08.13.2020 17:55 | 08.13.2020 18:12 | 08.13.2020 18:18 | 08.13.2020 18:23 |
|                                   | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                          |                   | 873 9.92         | 3700 49.9        | 3650 49.6        | 2680 49.9        | 2670 49.8        | 2570 49.9        |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 669943



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 21C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Thu 08.13.2020 09:56  
**Report Date:** 08.17.2020 11:27  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 669943-025       | 669943-026       | 669943-027       | 669943-028       | 669943-029       | 669943-030       |
|------------------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                                          | <i>Field Id:</i>  | Trench 3 (8')    | Trench 3 (9')    | Trench 4 (0-1')  | Trench 4 (1')    | Trench 4 (2')    | Trench 4 (3')    |
|                                          | <i>Depth:</i>     | 8- ft            | 9- ft            | 0-1 ft           | 1- ft            | 2- ft            | 3- ft            |
|                                          | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |
|                                          | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> |                  |                  | 08.14.2020 08:47 |                  |                  |                  |
|                                          | <i>Analyzed:</i>  |                  |                  | 08.15.2020 00:07 |                  |                  |                  |
|                                          | <i>Units/RL:</i>  |                  |                  | mg/kg RL         |                  |                  |                  |
| Benzene                                  |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| Toluene                                  |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| Ethylbenzene                             |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| m,p-Xylenes                              |                   |                  |                  | <0.00400 0.00400 |                  |                  |                  |
| o-Xylene                                 |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| Total Xylenes                            |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| Total BTEX                               |                   |                  |                  | <0.00200 0.00200 |                  |                  |                  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | *****            | *****            | *****            | *****            | *****            | *****            |
|                                          | <i>Analyzed:</i>  | 08.13.2020 18:29 | 08.13.2020 18:45 | 08.13.2020 18:51 | 08.13.2020 18:57 | 08.13.2020 19:02 | 08.13.2020 19:08 |
|                                          | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |
| Chloride                                 |                   | 517 10.0         | 586 10.0         | 77.8 9.98        | 98.5 9.92        | 1080 49.9        | 2630 49.8        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> |                  |                  | 08.13.2020 17:10 |                  |                  |                  |
|                                          | <i>Analyzed:</i>  |                  |                  | 08.13.2020 22:34 |                  |                  |                  |
|                                          | <i>Units/RL:</i>  |                  |                  | mg/kg RL         |                  |                  |                  |
| Gasoline Range Hydrocarbons (GRO)        |                   |                  |                  | <50.2 50.2       |                  |                  |                  |
| Diesel Range Organics (DRO)              |                   |                  |                  | <50.2 50.2       |                  |                  |                  |
| Motor Oil Range Hydrocarbons (MRO)       |                   |                  |                  | <50.2 50.2       |                  |                  |                  |
| Total TPH                                |                   |                  |                  | <50.2 50.2       |                  |                  |                  |

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## Certificate of Analysis Summary 669943

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 21C-MD-02256

Contact: Mike Carmona

Project Location: Lea County, New Mexico

Date Received in Lab: Thu 08.13.2020 09:56

Report Date: 08.17.2020 11:27

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>         | <i>Lab Id:</i>    | 669943-031       | 669943-032       | 669943-033       | 669943-034       | 669943-035       |  |
|-----------------------------------|-------------------|------------------|------------------|------------------|------------------|------------------|--|
|                                   | <i>Field Id:</i>  | Trench 4 (4')    | Trench 4 (5')    | Trench 4 (6')    | Trench 4 (7')    | Trench 4 (8')    |  |
|                                   | <i>Depth:</i>     | 4- ft            | 5- ft            | 6- ft            | 7- ft            | 8- ft            |  |
|                                   | <i>Matrix:</i>    | SOIL             | SOIL             | SOIL             | SOIL             | SOIL             |  |
|                                   | <i>Sampled:</i>   | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 | 08.12.2020 00:00 |  |
| Inorganic Anions by EPA 300/300.1 | <i>Extracted:</i> | *** ** *         | *** ** *         | *** ** *         | *** ** *         | *** ** *         |  |
|                                   | <i>Analyzed:</i>  | 08.13.2020 19:13 | 08.13.2020 19:30 | 08.13.2020 19:47 | 08.13.2020 19:52 | 08.13.2020 19:58 |  |
|                                   | <i>Units/RL:</i>  | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         | mg/kg RL         |  |
| Chloride                          |                   | 3070 50.0        | 3890 50.1        | 3120 50.2        | 838 9.94         | 400 10.1         |  |

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# Analytical Report 669943

for

**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Caballo Riser**

**21C-MD-02256**

**08.17.2020**

Collected By: Client

**1089 N Canal Street  
Carlsbad, NM 88220**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-37), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2019-058), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TN102385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



08.17.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **669943**

**Caballo Riser**

Project Address: Lea County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 669943. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 669943 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Sample Cross Reference 669943

## Tetra Tech- Midland, Midland, TX

## Caballo Riser

| Sample Id       | Matrix | Date Collected   | Sample Depth | Lab Sample Id |
|-----------------|--------|------------------|--------------|---------------|
| Trench 1 (0-1') | S      | 08.12.2020 00:00 | 0 - 1 ft     | 669943-001    |
| Trench 1 (1')   | S      | 08.12.2020 00:00 | 1 ft         | 669943-002    |
| Trench 1 (2')   | S      | 08.12.2020 00:00 | 2 ft         | 669943-003    |
| Trench 1 (3')   | S      | 08.12.2020 00:00 | 3 ft         | 669943-004    |
| Trench 1 (4')   | S      | 08.12.2020 00:00 | 4 ft         | 669943-005    |
| Trench 1 (5')   | S      | 08.12.2020 00:00 | 5 ft         | 669943-006    |
| Trench 1 (6')   | S      | 08.12.2020 00:00 | 6 ft         | 669943-007    |
| Trench 2 (0-1') | S      | 08.12.2020 00:00 | 0 - 1 ft     | 669943-008    |
| Trench 2 (1')   | S      | 08.12.2020 00:00 | 1 ft         | 669943-009    |
| Trench 2 (2')   | S      | 08.12.2020 00:00 | 2 ft         | 669943-010    |
| Trench 2 (3')   | S      | 08.12.2020 00:00 | 3 ft         | 669943-011    |
| Trench 2 (4')   | S      | 08.12.2020 00:00 | 4 ft         | 669943-012    |
| Trench 2 (5')   | S      | 08.12.2020 00:00 | 5 ft         | 669943-013    |
| Trench 2 (6')   | S      | 08.12.2020 00:00 | 6 ft         | 669943-014    |
| Trench 2 (7')   | S      | 08.12.2020 00:00 | 7 ft         | 669943-015    |
| Trench 2 (8')   | S      | 08.12.2020 00:00 | 8 ft         | 669943-016    |
| Trench 3 (0-1') | S      | 08.12.2020 00:00 | 0 - 1 ft     | 669943-017    |
| Trench 3 (1')   | S      | 08.12.2020 00:00 | 1 ft         | 669943-018    |
| Trench 3 (2')   | S      | 08.12.2020 00:00 | 2 ft         | 669943-019    |
| Trench 3 (3')   | S      | 08.12.2020 00:00 | 3 ft         | 669943-020    |
| Trench 3 (4')   | S      | 08.12.2020 00:00 | 4 ft         | 669943-021    |
| Trench 3 (5')   | S      | 08.12.2020 00:00 | 5 ft         | 669943-022    |
| Trench 3 (6')   | S      | 08.12.2020 00:00 | 6 ft         | 669943-023    |
| Trench 3 (7')   | S      | 08.12.2020 00:00 | 7 ft         | 669943-024    |
| Trench 3 (8')   | S      | 08.12.2020 00:00 | 8 ft         | 669943-025    |
| Trench 3 (9')   | S      | 08.12.2020 00:00 | 9 ft         | 669943-026    |
| Trench 4 (0-1') | S      | 08.12.2020 00:00 | 0 - 1 ft     | 669943-027    |
| Trench 4 (1')   | S      | 08.12.2020 00:00 | 1 ft         | 669943-028    |
| Trench 4 (2')   | S      | 08.12.2020 00:00 | 2 ft         | 669943-029    |
| Trench 4 (3')   | S      | 08.12.2020 00:00 | 3 ft         | 669943-030    |
| Trench 4 (4')   | S      | 08.12.2020 00:00 | 4 ft         | 669943-031    |
| Trench 4 (5')   | S      | 08.12.2020 00:00 | 5 ft         | 669943-032    |
| Trench 4 (6')   | S      | 08.12.2020 00:00 | 6 ft         | 669943-033    |
| Trench 4 (7')   | S      | 08.12.2020 00:00 | 7 ft         | 669943-034    |
| Trench 4 (8')   | S      | 08.12.2020 00:00 | 8 ft         | 669943-035    |



## CASE NARRATIVE

**Client Name: Tetra Tech- Midland**

**Project Name: Caballo Riser**

Project ID: 21C-MD-02256  
Work Order Number(s): 669943

Report Date: 08.17.2020  
Date Received: 08.13.2020

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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 1 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-001 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
 Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 698    | 10.0 | mg/kg | 08.13.2020 14:51 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DTH % Moisture:  
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight  
 Seq Number: 3134547

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 08.14.2020 10:04 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 08.14.2020 10:04 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 08.14.2020 10:04 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 08.14.2020 10:04 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 87         | %     | 70-135 | 08.14.2020 10:04 |      |
| o-Terphenyl    | 84-15-1    | 85         | %     | 70-135 | 08.14.2020 10:04 |      |





# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 1 (0-1')**

Matrix: Soil

Date Received: 08.13.2020 09:56

Lab Sample Id: 669943-001

Date Collected: 08.12.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.13.2020 10:09

Basis: Wet Weight

Seq Number: 3134544

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 08.13.2020 22:00     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 108               | %            | 70-130        | 08.13.2020 22:00     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 08.13.2020 22:00     |             |     |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 1 (1')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-002 Date Collected: 08.12.2020 00:00 Sample Depth: 1 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 906    | 9.92 | mg/kg | 08.13.2020 15:08 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 1 (2')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-003 Date Collected: 08.12.2020 00:00 Sample Depth: 2 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1890   | 49.9 | mg/kg | 08.13.2020 15:13 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 1 (3')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-004 Date Collected: 08.12.2020 00:00 Sample Depth: 3 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5990   | 50.1 | mg/kg | 08.13.2020 15:19 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 1 (4')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-005 Date Collected: 08.12.2020 00:00 Sample Depth: 4 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1910   | 50.1 | mg/kg | 08.13.2020 15:25 |      | 5   |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 1 (5')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-006 Date Collected: 08.12.2020 00:00 Sample Depth: 5 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 77.5   | 9.98 | mg/kg | 08.13.2020 15:41 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 1 (6')**

Matrix: Soil

Date Received: 08.13.2020 09:56

Lab Sample Id: 669943-007

Date Collected: 08.12.2020 00:00

Sample Depth: 6 ft

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.12.2020 12:58

Basis: Wet Weight

Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 12.9   | 9.92 | mg/kg | 08.13.2020 15:47 |      | 1   |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Trench 2 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-008 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
 Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 96.4   | 9.98 | mg/kg | 08.13.2020 15:53 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DTH % Moisture:  
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight  
 Seq Number: 3134547

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.9  | 49.9 | mg/kg | 08.13.2020 21:53 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.9  | 49.9 | mg/kg | 08.13.2020 21:53 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.9  | 49.9 | mg/kg | 08.13.2020 21:53 | U    | 1   |
| Total TPH                          | PHC635     | <49.9  | 49.9 | mg/kg | 08.13.2020 21:53 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 96         | %     | 70-135 | 08.13.2020 21:53 |      |
| o-Terphenyl    | 84-15-1    | 95         | %     | 70-135 | 08.13.2020 21:53 |      |





# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Trench 2 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-008 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.13.2020 10:09 Basis: Wet Weight  
 Seq Number: 3134544

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 08.13.2020 22:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 08.13.2020 22:20     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 08.13.2020 22:20     |             |     |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (1')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-009 Date Collected: 08.12.2020 00:00 Sample Depth: 1 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 75.3   | 10.0 | mg/kg | 08.13.2020 15:58 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (2')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-010 Date Collected: 08.12.2020 00:00 Sample Depth: 2 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 389    | 10.1 | mg/kg | 08.13.2020 16:04 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (3')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-011 Date Collected: 08.12.2020 00:00 Sample Depth: 3 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7020   | 49.6 | mg/kg | 08.13.2020 16:09 |      | 5   |



## Certificate of Analytical Results 669943

### Tetra Tech- Midland, Midland, TX

#### Caballo Riser

Sample Id: **Trench 2 (4')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-012 Date Collected: 08.12.2020 00:00 Sample Depth: 4 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6070   | 49.8 | mg/kg | 08.13.2020 16:26 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (5')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-013 Date Collected: 08.12.2020 00:00 Sample Depth: 5 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4650   | 50.2 | mg/kg | 08.13.2020 16:31 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (6')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-014 Date Collected: 08.12.2020 00:00 Sample Depth: 6 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1640   | 50.3 | mg/kg | 08.13.2020 16:48 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (7')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-015 Date Collected: 08.12.2020 00:00 Sample Depth: 7 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 396    | 50.4 | mg/kg | 08.13.2020 16:54 |      | 5   |



**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 2 (8')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-016 Date Collected: 08.12.2020 00:00 Sample Depth: 8 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 42.3   | 10.0 | mg/kg | 08.13.2020 16:59 |      | 1   |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 3 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-017 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
 Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 73.2   | 10.1 | mg/kg | 08.13.2020 17:05 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DTH % Moisture:  
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight  
 Seq Number: 3134547

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <49.8  | 49.8 | mg/kg | 08.13.2020 22:14 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <49.8  | 49.8 | mg/kg | 08.13.2020 22:14 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <49.8  | 49.8 | mg/kg | 08.13.2020 22:14 | U    | 1   |
| Total TPH                          | PHC635     | <49.8  | 49.8 | mg/kg | 08.13.2020 22:14 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 91         | %     | 70-135 | 08.13.2020 22:14 |      |
| o-Terphenyl    | 84-15-1    | 91         | %     | 70-135 | 08.13.2020 22:14 |      |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Trench 3 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-017 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: BTEX by EPA 8021B Prep Method: SW5035A  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.14.2020 08:47 Basis: Wet Weight  
 Seq Number: 3134693

| Parameter     | Cas Number  | Result   | RL      | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|----------|---------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| Toluene       | 108-88-3    | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00402 | 0.00402 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |
| Total BTEX    |             | <0.00201 | 0.00201 | mg/kg | 08.14.2020 23:45 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 100        | %     | 70-130 | 08.14.2020 23:45 |      |
| 4-Bromofluorobenzene | 460-00-4   | 95         | %     | 70-130 | 08.14.2020 23:45 |      |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (1')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-018 Date Collected: 08.12.2020 00:00 Sample Depth: 1 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 171    | 10.0 | mg/kg | 08.13.2020 17:11 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (2')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-019 Date Collected: 08.12.2020 00:00 Sample Depth: 2 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 873    | 9.92 | mg/kg | 08.13.2020 17:16 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (3')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-020 Date Collected: 08.12.2020 00:00 Sample Depth: 3 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 12:58 Basis: Wet Weight  
Seq Number: 3134556

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3700   | 49.9 | mg/kg | 08.13.2020 17:22 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (4')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-021 Date Collected: 08.12.2020 00:00 Sample Depth: 4 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3650   | 49.6 | mg/kg | 08.13.2020 17:55 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (5')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-022 Date Collected: 08.12.2020 00:00 Sample Depth: 5 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2680   | 49.9 | mg/kg | 08.13.2020 18:12 |      | 5   |



**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (6')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-023 Date Collected: 08.12.2020 00:00 Sample Depth: 6 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2670   | 49.8 | mg/kg | 08.13.2020 18:18 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (7')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-024 Date Collected: 08.12.2020 00:00 Sample Depth: 7 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2570   | 49.9 | mg/kg | 08.13.2020 18:23 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 3 (8')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-025 Date Collected: 08.12.2020 00:00 Sample Depth: 8 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 517    | 10.0 | mg/kg | 08.13.2020 18:29 |      | 1   |



## Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 3 (9')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-026 Date Collected: 08.12.2020 00:00 Sample Depth: 9 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 586    | 10.0 | mg/kg | 08.13.2020 18:45 |      | 1   |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 4 (0-1')** Matrix: Soil Date Received: 08.13.2020 09:56  
 Lab Sample Id: 669943-027 Date Collected: 08.12.2020 00:00 Sample Depth: 0 - 1 ft  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: MAB % Moisture:  
 Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
 Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 77.8   | 9.98 | mg/kg | 08.13.2020 18:51 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DTH % Moisture:  
 Analyst: DTH Date Prep: 08.13.2020 17:10 Basis: Wet Weight  
 Seq Number: 3134547

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.2  | 50.2 | mg/kg | 08.13.2020 22:34 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.2  | 50.2 | mg/kg | 08.13.2020 22:34 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.2  | 50.2 | mg/kg | 08.13.2020 22:34 | U    | 1   |
| Total TPH                          | PHC635     | <50.2  | 50.2 | mg/kg | 08.13.2020 22:34 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 90         | %     | 70-135 | 08.13.2020 22:34 |      |
| o-Terphenyl    | 84-15-1    | 92         | %     | 70-135 | 08.13.2020 22:34 |      |



# Certificate of Analytical Results 669943

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Trench 4 (0-1')**

Matrix: Soil

Date Received: 08.13.2020 09:56

Lab Sample Id: 669943-027

Date Collected: 08.12.2020 00:00

Sample Depth: 0 - 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MAB

% Moisture:

Analyst: MAB

Date Prep: 08.14.2020 08:47

Basis: Wet Weight

Seq Number: 3134693

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 08.15.2020 00:07     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 08.15.2020 00:07     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 08.15.2020 00:07     |             |     |



## Certificate of Analytical Results 669943

### Tetra Tech- Midland, Midland, TX

#### Caballo Riser

Sample Id: **Trench 4 (1')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-028 Date Collected: 08.12.2020 00:00 Sample Depth: 1 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 98.5   | 9.92 | mg/kg | 08.13.2020 18:57 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (2')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-029 Date Collected: 08.12.2020 00:00 Sample Depth: 2 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1080   | 49.9 | mg/kg | 08.13.2020 19:02 |      | 5   |



**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (3')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-030 Date Collected: 08.12.2020 00:00 Sample Depth: 3 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2630   | 49.8 | mg/kg | 08.13.2020 19:08 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (4')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-031 Date Collected: 08.12.2020 00:00 Sample Depth: 4 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3070   | 50.0 | mg/kg | 08.13.2020 19:13 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (5')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-032 Date Collected: 08.12.2020 00:00 Sample Depth: 5 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3890   | 50.1 | mg/kg | 08.13.2020 19:30 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (6')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-033 Date Collected: 08.12.2020 00:00 Sample Depth: 6 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3120   | 50.2 | mg/kg | 08.13.2020 19:47 |      | 5   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (7')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-034 Date Collected: 08.12.2020 00:00 Sample Depth: 7 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 838    | 9.94 | mg/kg | 08.13.2020 19:52 |      | 1   |

**Certificate of Analytical Results 669943****Tetra Tech- Midland, Midland, TX**

Caballo Riser

Sample Id: **Trench 4 (8')** Matrix: Soil Date Received: 08.13.2020 09:56  
Lab Sample Id: 669943-035 Date Collected: 08.12.2020 00:00 Sample Depth: 8 ft  
Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
Tech: MAB % Moisture:  
Analyst: MAB Date Prep: 08.12.2020 14:00 Basis: Wet Weight  
Seq Number: 3134558

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 400    | 10.1 | mg/kg | 08.13.2020 19:58 |      | 1   |

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.      **ND** Not Detected.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK** Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS** Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



### Tetra Tech- Midland Caballo Riser

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134556

Matrix: Solid

Prep Method: E300P

Date Prep: 08.12.2020

MB Sample Id: 7709387-1-BLK

LCS Sample Id: 7709387-1-BKS

LCSD Sample Id: 7709387-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <10.0     | 250          | 265        | 106      | 265         | 106       | 90-110 | 0    | 20        | mg/kg | 08.13.2020 14:40 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134558

Matrix: Solid

Prep Method: E300P

Date Prep: 08.12.2020

MB Sample Id: 7709388-1-BLK

LCS Sample Id: 7709388-1-BKS

LCSD Sample Id: 7709388-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <10.0     | 250          | 264        | 106      | 265         | 106       | 90-110 | 0    | 20        | mg/kg | 08.13.2020 17:44 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134556

Matrix: Soil

Prep Method: E300P

Date Prep: 08.12.2020

Parent Sample Id: 669943-001

MS Sample Id: 669943-001 S

MSD Sample Id: 669943-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 698           | 201          | 898       | 100     | 898        | 100      | 90-110 | 0    | 20        | mg/kg | 08.13.2020 14:57 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134556

Matrix: Soil

Prep Method: E300P

Date Prep: 08.12.2020

Parent Sample Id: 669943-011

MS Sample Id: 669943-011 S

MSD Sample Id: 669943-011 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 7020          | 202          | 7210      | 94      | 7240       | 109      | 90-110 | 0    | 20        | mg/kg | 08.13.2020 16:15 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134558

Matrix: Soil

Prep Method: E300P

Date Prep: 08.12.2020

Parent Sample Id: 669943-021

MS Sample Id: 669943-021 S

MSD Sample Id: 669943-021 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3650          | 201          | 3840      | 95      | 3830       | 90       | 90-110 | 0    | 20        | mg/kg | 08.13.2020 18:01 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3134558

Matrix: Soil

Prep Method: E300P

Date Prep: 08.12.2020

Parent Sample Id: 669943-031

MS Sample Id: 669943-031 S

MSD Sample Id: 669943-031 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3070          | 199          | 3250      | 90      | 3260       | 95       | 90-110 | 0    | 20        | mg/kg | 08.13.2020 19:19 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec





## Tetra Tech- Midland

### Caballo Riser

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134547

MB Sample Id: 7709452-1-BLK

Matrix: Solid

LCS Sample Id: 7709452-1-BKS

Prep Method: SW8015P

Date Prep: 08.13.2020

LCSD Sample Id: 7709452-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 876        | 88       | 906         | 91        | 70-135 | 3    | 35        | mg/kg | 08.13.2020 19:12 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 919        | 92       | 936         | 94        | 70-135 | 2    | 35        | mg/kg | 08.13.2020 19:12 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 103     |         | 113      |          | 115       |           | 70-135 | %     | 08.13.2020 19:12 |
| o-Terphenyl    | 107     |         | 105      |          | 105       |           | 70-135 | %     | 08.13.2020 19:12 |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134547

Matrix: Solid

MB Sample Id: 7709452-1-BLK

Prep Method: SW8015P

Date Prep: 08.13.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 08.13.2020 18:52 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3134547

Matrix: Soil

Parent Sample Id: 669943-001

MS Sample Id: 669943-001 S

Prep Method: SW8015P

Date Prep: 08.13.2020

MSD Sample Id: 669943-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.8         | 995          | 883       | 89      | 914        | 90       | 70-135 | 3    | 35        | mg/kg | 08.13.2020 20:12 |      |
| Diesel Range Organics (DRO)       | <49.8         | 995          | 921       | 93      | 947        | 94       | 70-135 | 3    | 35        | mg/kg | 08.13.2020 20:12 |      |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 103     |         | 107      |          | 70-135 | %     | 08.13.2020 20:12 |
| o-Terphenyl    | 94      |         | 97       |          | 70-135 | %     | 08.13.2020 20:12 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3134544

Matrix: Solid

MB Sample Id: 7709363-1-BLK

LCS Sample Id: 7709363-1-BKS

Prep Method: SW5035A

Date Prep: 08.13.2020

LCSD Sample Id: 7709363-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0959     | 96       | 0.0956      | 96        | 70-130 | 0    | 35        | mg/kg | 08.13.2020 12:59 |      |
| Toluene      | <0.00200  | 0.100        | 0.0902     | 90       | 0.0919      | 92        | 70-130 | 2    | 35        | mg/kg | 08.13.2020 12:59 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0946     | 95       | 0.0957      | 96        | 71-129 | 1    | 35        | mg/kg | 08.13.2020 12:59 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.191      | 96       | 0.193       | 97        | 70-135 | 1    | 35        | mg/kg | 08.13.2020 12:59 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0937     | 94       | 0.0969      | 97        | 71-133 | 3    | 35        | mg/kg | 08.13.2020 12:59 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 102     |         | 93       |          | 102       |           | 70-130 | %     | 08.13.2020 12:59 |
| 4-Bromofluorobenzene | 104     |         | 90       |          | 99        |           | 70-130 | %     | 08.13.2020 12:59 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3134693

Matrix: Solid

Prep Method: SW5035A

Date Prep: 08.14.2020

MB Sample Id: 7709453-1-BLK

LCS Sample Id: 7709453-1-BKS

LCSD Sample Id: 7709453-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.110      | 110      | 0.101       | 101       | 70-130 | 9    | 35        | mg/kg | 08.14.2020 14:03 |      |
| Toluene      | <0.00200  | 0.100        | 0.105      | 105      | 0.0961      | 96        | 70-130 | 9    | 35        | mg/kg | 08.14.2020 14:03 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0978     | 98       | 0.0893      | 89        | 71-129 | 9    | 35        | mg/kg | 08.14.2020 14:03 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.198      | 99       | 0.181       | 91        | 70-135 | 9    | 35        | mg/kg | 08.14.2020 14:03 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0981     | 98       | 0.0896      | 90        | 71-133 | 9    | 35        | mg/kg | 08.14.2020 14:03 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 98      |         | 98       |          | 98        |           | 70-130 | %     | 08.14.2020 14:03 |
| 4-Bromofluorobenzene | 93      |         | 98       |          | 98        |           | 70-130 | %     | 08.14.2020 14:03 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3134544

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.13.2020

Parent Sample Id: 669902-001

MS Sample Id: 669902-001 S

MSD Sample Id: 669902-001 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00202      | 0.101        | 0.107     | 106     | 0.0967     | 97       | 70-130 | 10   | 35        | mg/kg | 08.13.2020 13:40 |      |
| Toluene      | <0.00202      | 0.101        | 0.0949    | 94      | 0.0911     | 91       | 70-130 | 4    | 35        | mg/kg | 08.13.2020 13:40 |      |
| Ethylbenzene | <0.00202      | 0.101        | 0.0826    | 82      | 0.0922     | 92       | 71-129 | 11   | 35        | mg/kg | 08.13.2020 13:40 |      |
| m,p-Xylenes  | <0.00403      | 0.202        | 0.161     | 80      | 0.185      | 93       | 70-135 | 14   | 35        | mg/kg | 08.13.2020 13:40 |      |
| o-Xylene     | <0.00202      | 0.101        | 0.0821    | 81      | 0.0953     | 95       | 71-133 | 15   | 35        | mg/kg | 08.13.2020 13:40 |      |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 103     |         | 102      |          | 70-130 | %     | 08.13.2020 13:40 |
| 4-Bromofluorobenzene | 97      |         | 98       |          | 70-130 | %     | 08.13.2020 13:40 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3134693

Matrix: Soil

Prep Method: SW5035A

Date Prep: 08.14.2020

Parent Sample Id: 669976-001

MS Sample Id: 669976-001 S

MSD Sample Id: 669976-001 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00199      | 0.0996       | 0.105     | 105     | 0.105      | 105      | 70-130 | 0    | 35        | mg/kg | 08.15.2020 01:59 |      |
| Toluene      | <0.00199      | 0.0996       | 0.100     | 100     | 0.0999     | 100      | 70-130 | 0    | 35        | mg/kg | 08.15.2020 01:59 |      |
| Ethylbenzene | <0.00199      | 0.0996       | 0.0958    | 96      | 0.0926     | 93       | 71-129 | 3    | 35        | mg/kg | 08.15.2020 01:59 |      |
| m,p-Xylenes  | <0.00398      | 0.199        | 0.188     | 94      | 0.188      | 94       | 70-135 | 0    | 35        | mg/kg | 08.15.2020 01:59 |      |
| o-Xylene     | <0.00199      | 0.0996       | 0.0936    | 94      | 0.0933     | 94       | 71-133 | 0    | 35        | mg/kg | 08.15.2020 01:59 |      |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 100     |         | 100      |          | 70-130 | %     | 08.15.2020 01:59 |
| 4-Bromofluorobenzene | 101     |         | 99       |          | 70-130 | %     | 08.15.2020 01:59 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

## Analysis Request of Custody Record



Tetra Tech, Inc.

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

Page 1 of 2

669943

|                                          |  |                                  |  |
|------------------------------------------|--|----------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona       |  |
| Project Name: Caballo Riser              |  |                                  |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256         |  |
| Invoice to: EOG - Galan Kelley           |  |                                  |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: John Thurston |  |
| Comments:                                |  |                                  |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) | LAB USE ONLY | REMARKS: |                                             |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|--------------|----------|---------------------------------------------|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |              |          |                                             |
|                         |                       |           |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |              |          |                                             |
|                         | Trench 1 (0-1')       | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            | X        | BTEX 8021B BTEX 8260B                       |
|                         | Trench 1 (1')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            | X        | TPH TX1005 (Ext to C35)                     |
|                         | Trench 1 (2')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            | X        | TPH 8015M ( GRO - DRO - ORO - MRO)          |
|                         | Trench 1 (3')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | PAH 8270C                                   |
|                         | Trench 1 (4')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | Total Metals Ag As Ba Cd Cr Pb Se Hg        |
|                         | Trench 1 (5')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | TCLP Metals Ag As Ba Cd Cr Pb Se Hg         |
|                         | Trench 1 (6')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | TCLP Volatiles                              |
|                         | Trench 2 (0-1')       | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | TCLP Semi Volatiles                         |
|                         | Trench 2 (1')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | RCI                                         |
|                         | Trench 2 (2')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N            |          | GC/MS Vol. 8260B / 624                      |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | GC/MS Semi. Vol. 8270C/625                  |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | PCB's 8082 / 608                            |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | NORM                                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | PLM (Asbestos)                              |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | Chloride                                    |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | Chloride Sulfate TDS                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | General Water Chemistry (see attached list) |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | Anion/Cation Balance                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | TPH 8015R                                   |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |              |          | Hold                                        |

|                           |               |           |                          |               |           |
|---------------------------|---------------|-----------|--------------------------|---------------|-----------|
| Requested by: <i>John</i> | Date: 8/13/20 | Time: 95u | Received by: <i>John</i> | Date: 8/13/20 | Time: 95u |
| Requested by:             | Date:         | Time:     | Received by:             | Date:         | Time:     |

|               |       |       |              |       |       |
|---------------|-------|-------|--------------|-------|-------|
| Requested by: | Date: | Time: | Received by: | Date: | Time: |
|---------------|-------|-------|--------------|-------|-------|

|                    |        |
|--------------------|--------|
| Sample Temperature | 06/0-4 |
|--------------------|--------|

|                                                                      |          |
|----------------------------------------------------------------------|----------|
| LAB USE ONLY                                                         | REMARKS: |
| <input type="checkbox"/> STANDARD                                    |          |
| <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 12 hr |          |
| <input type="checkbox"/> Rush Charges Authorized                     |          |
| <input type="checkbox"/> Special Report Limits or TRRP Report        |          |

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:



# Tetra Tech, Inc.

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



## Analysis Request of Chain of Custody Record

|                                          |  |                                  |  |
|------------------------------------------|--|----------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona       |  |
| Project Name: Caballo Riser              |  |                                  |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256         |  |
| Invoice to: EOG - Galan Kelley           |  |                                  |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: John Thurston |  |
| Comments:                                |  |                                  |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) |   |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|---|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |   |
|                         |                       |           |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |   |
|                         | Trench 2 (3)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 2 (4)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 2 (5)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 2 (6)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 2 (7)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 2 (8)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 3 (0-1')       | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 3 (1')         | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 3 (2)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Trench 3 (3)          | 8/12/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |

| LAB USE ONLY                                                         | REMARKS: |
|----------------------------------------------------------------------|----------|
| <input type="checkbox"/> STANDARD                                    |          |
| <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr |          |
| <input type="checkbox"/> Rush Charges Authorized                     |          |
| <input type="checkbox"/> Special Report Limits or TRRP Report        |          |

| ANALYSIS REQUEST<br>(Circle or Specify Method No.) |
|----------------------------------------------------|
| BTEX 8021B BTEX 8260B                              |
| TPH TX1005 (Ext to C35)                            |
| TPH 8015M ( GRO - DRO - ORO - MRO)                 |
| PAH 8270C                                          |
| Total Metals Ag As Ba Cd Cr Pb Se Hg               |
| TCLP Metals Ag As Ba Cd Cr Pb Se Hg                |
| TCLP Volatiles                                     |
| TCLP Semi Volatiles                                |
| RCI                                                |
| GC/MS Vol. 8260B / 624                             |
| GC/MS Semi. Vol. 8270C/625                         |
| PCB's 8082 / 608                                   |
| NORM                                               |
| PLM (Asbestos)                                     |
| Chloride                                           |
| Chloride Sulfate TDS                               |
| General Water Chemistry (see attached list)        |
| Anion/Cation Balance                               |
| TPH 8015R                                          |
| Hold                                               |

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

666943



## Analysis Request of Chain of Custody Record



## Tetra Tech, Inc.

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

|                                          |  |                                  |  |
|------------------------------------------|--|----------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona       |  |
| Project Name: Caballo Riser              |  |                                  |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256         |  |
| Invoice to: EOG - Galan Kelley           |  |                                  |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: John Thurston |  |
| Comments:                                |  |                                  |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING  |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) | ANALYSIS REQUEST<br>(Circle or Specify Method No.) |                                             |
|-------------------------|-----------------------|-----------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|----------------------------------------------------|---------------------------------------------|
|                         |                       | DATE      | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |                                                    |                                             |
|                         |                       |           |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |                                                    |                                             |
|                         | Trench 3 (4')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | BTEX 8021B BTEX 8260B                       |
|                         | Trench 3 (5')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | TPH TX1005 (Ext to C35)                     |
|                         | Trench 3 (6')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | TPH 8015M ( GRO - DRO - ORO - MRO)          |
|                         | Trench 3 (7')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | PAH 8270C                                   |
|                         | Trench 3 (8')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | Total Metals Ag As Ba Cd Cr Pb Se Hg        |
|                         | Trench 3 (9')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | TCLP Metals Ag As Ba Cd Cr Pb Se Hg         |
|                         | Trench 4 (0-1')       | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | TCLP Volatiles                              |
|                         | Trench 4 (1')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | TCLP Semi Volatiles                         |
|                         | Trench 4 (2')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | RCI                                         |
|                         | Trench 4 (3')         | 8/12/2020 |      | X      |      | X                   |                  |     |      |            |              | 1              | N                                                  | GC/MS Vol. 8260B / 624                      |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | GC/MS Semi. Vol. 8270C/625                  |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | PCB's 8082 / 608                            |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | NORM                                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | PLM (Asbestos)                              |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | Chloride                                    |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | Chloride Sulfate TDS                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | General Water Chemistry (see attached list) |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | Anion/Cation Balance                        |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | TPH 8015R                                   |
|                         |                       |           |      |        |      |                     |                  |     |      |            |              |                |                                                    | Hold                                        |

|                                     |               |           |                                 |               |           |
|-------------------------------------|---------------|-----------|---------------------------------|---------------|-----------|
| Relinquished by: <i>[Signature]</i> | Date: 8/13/20 | Time: 950 | Received by: <i>[Signature]</i> | Date: 8/13/20 | Time: 950 |
| Relinquished by:                    | Date:         | Time:     | Received by:                    | Date:         | Time:     |

|                  |       |       |              |       |       |
|------------------|-------|-------|--------------|-------|-------|
| Relinquished by: | Date: | Time: | Received by: | Date: | Time: |
|------------------|-------|-------|--------------|-------|-------|

|                                                                                                                                                                                                                                 |                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| LAB USE ONLY                                                                                                                                                                                                                    | REMARKS:                                                                          |
| <input type="checkbox"/> STANDARD<br><input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr<br><input type="checkbox"/> Flush Charges Authorized<br><input type="checkbox"/> Special Report Limits or TRRP Report | Sample Temperature: 0.0 / 0.4<br>(Circle) HAND DELIVERED<br>FEDEX UPS Tracking #: |

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**Tetra Tech, Inc.**

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

### Analysis Request of Chain of Custody Record

Page 4 of 4

Ver 9943

[illegible]

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# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

**Client:** Tetra Tech- Midland**Date/ Time Received:** 08.13.2020 09.56.00 AM**Work Order #:** 669943**Acceptable Temperature Range:** 0 - 6 degC**Air and Metal samples Acceptable Range:** Ambient**Temperature Measuring device used :** T-NM-007

| Sample Receipt Checklist                                | Comments |
|---------------------------------------------------------|----------|
| #1 *Temperature of cooler(s)?                           | .4       |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes      |
| #5 Custody Seals intact on sample bottles?              | Yes      |
| #6 *Custody Seals Signed and dated?                     | Yes      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | No       |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | No       |
| #18 Water VOC samples have zero headspace?              | N/A      |

Samples received in bulk containers.

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

**Checklist completed by:**

Elizabeth McClellan

Date: 08.13.2020

**Checklist reviewed by:**

Jessica Kramer

Date: 08.13.2020

## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-001<br>Bottomhole-1 (4.5'-5')             | 677578-002<br>Bottomhole-2 (4.5'-5')             | 677578-003<br>Bottomhole-3 (4.5'-5')             | 677578-004<br>Bottomhole-4 (4.5'-5')             | 677578-005<br>Bottomhole-5 (4.5'-5')             | 677578-006<br>Bottomhole-6 (4.5'-5')             |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 15:00<br>11.12.2020 19:39<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 20:05<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 20:30<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 20:55<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 21:21<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 21:46<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| Toluene                                  |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| Ethylbenzene                             |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| m,p-Xylenes                              |                                                                                          | <0.00396 0.00396                                 | <0.00398 0.00398                                 | <0.00399 0.00399                                 | <0.00400 0.00400                                 | <0.00398 0.00398                                 | <0.00402 0.00402                                 |
| o-Xylene                                 |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| Total Xylenes                            |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| Total BTEX                               |                                                                                          | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00201 0.00201                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.11.2020 16:50<br>11.11.2020 23:04<br>mg/kg RL | 11.11.2020 16:50<br>11.11.2020 23:10<br>mg/kg RL | 11.11.2020 16:50<br>11.11.2020 23:15<br>mg/kg RL | 11.11.2020 16:50<br>11.11.2020 23:20<br>mg/kg RL | 11.11.2020 16:50<br>11.11.2020 23:25<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 09:03<br>mg/kg RL |
| Chloride                                 |                                                                                          | 8370 50.2                                        | 8000 50.0                                        | 6160 50.0                                        | 8600 50.0                                        | 6290 50.0                                        | 4180 X 25.1                                      |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 12:31<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 13:37<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 13:59<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 14:21<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 14:43<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 15:05<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-007<br>Bottomhole-7 (4.5'-5')             | 677578-008<br>Bottomhole-8 (4.5'-5')             | 677578-009<br>Bottomhole-9 (4.5'-5')             | 677578-010<br>Bottomhole-10 (4.5'-5')            | 677578-011<br>Bottomhole-11 (4.5'-5')            | 677578-012<br>Bottomhole-12 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 15:00<br>11.12.2020 22:12<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 22:38<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 23:03<br>mg/kg RL | 11.12.2020 15:00<br>11.12.2020 23:28<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 19:01<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 14:53<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| Toluene                                  |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| Ethylbenzene                             |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| m,p-Xylenes                              |                                                                                          | <0.00398 0.00398                                 | <0.00401 0.00401                                 | <0.00401 0.00401                                 | <0.00400 0.00400                                 | <0.00403 0.00403                                 | <0.00397 0.00397                                 |
| o-Xylene                                 |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| Total Xylenes                            |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| Total BTEX                               |                                                                                          | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00202 0.00202                                 | <0.00198 0.00198                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:30<br>11.12.2020 09:23<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 09:30<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 09:37<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 09:43<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:03<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:10<br>mg/kg RL |
| Chloride                                 |                                                                                          | 3200 24.8                                        | 3610 25.0                                        | 4150 25.2                                        | 4100 25.0                                        | 3810 25.0                                        | 4340 25.0                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 15:27<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 15:49<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 16:11<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 16:33<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 17:17<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 17:39<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-013<br>Bottomhole-13 (4.5'-5')            | 677578-014<br>Bottomhole-14 (4.5'-5')            | 677578-015<br>Bottomhole-15 (4.5'-5')            | 677578-016<br>Bottomhole-16 (4.5'-5')            | 677578-017<br>Bottomhole-17 (4.5'-5')            | 677578-018<br>Bottomhole-18 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.13.2020 11:00<br>11.13.2020 15:13<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 15:34<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 15:54<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 16:15<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 16:36<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 16:56<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| m,p-Xylenes                              |                                                                                          | <0.00400 0.00400                                 | <0.00399 0.00399                                 | <0.00400 0.00400                                 | <0.00401 0.00401                                 | <0.00400 0.00400                                 | <0.00399 0.00399                                 |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:30<br>11.12.2020 10:16<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:23<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:30<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:36<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 10:56<br>mg/kg RL | 11.12.2020 08:30<br>11.12.2020 11:03<br>mg/kg RL |
| Chloride                                 |                                                                                          | 3460 25.0                                        | 2890 25.1                                        | 2780 25.3                                        | 2920 X 24.8                                      | 3040 24.8                                        | 2820 25.2                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 18:01<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 18:23<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 18:45<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:07<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:29<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:51<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-019<br>Bottomhole-19 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-020<br>Bottomhole-20 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-021<br>Bottomhole-21 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-022<br>Bottomhole-22 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-023<br>Bottomhole-23 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-024<br>Bottomhole-24 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 |
|------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.13.2020 11:00<br>11.13.2020 17:17<br>mg/kg RL                      | 11.13.2020 11:00<br>11.13.2020 17:37<br>mg/kg RL                      | 11.13.2020 11:00<br>11.13.2020 14:32<br>mg/kg RL                      | 11.13.2020 11:00<br>11.13.2020 19:21<br>mg/kg RL                      | 11.13.2020 11:00<br>11.13.2020 19:42<br>mg/kg RL                      | 11.13.2020 11:00<br>11.13.2020 20:02<br>mg/kg RL                      |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| m,p-Xylenes                              |                                                                                          | <0.00401 0.00401                                                      | <0.00403 0.00403                                                      | <0.00396 0.00396                                                      | <0.00404 0.00404                                                      | <0.00404 0.00404                                                      | <0.00398 0.00398                                                      |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                                      | <0.00202 0.00202                                                      | <0.00198 0.00198                                                      | <0.00202 0.00202                                                      | <0.00202 0.00202                                                      | <0.00199 0.00199                                                      |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:30<br>11.12.2020 11:23<br>mg/kg RL                      | 11.12.2020 08:30<br>11.12.2020 11:30<br>mg/kg RL                      | 11.12.2020 08:30<br>11.12.2020 11:36<br>mg/kg RL                      | 11.12.2020 08:30<br>11.12.2020 11:43<br>mg/kg RL                      | 11.12.2020 08:30<br>11.12.2020 11:49<br>mg/kg RL                      | 11.12.2020 08:30<br>11.12.2020 11:56<br>mg/kg RL                      |
| Chloride                                 |                                                                                          | 2840 24.9                                                             | 2780 25.0                                                             | 3300 25.1                                                             | 3020 24.8                                                             | 3630 24.8                                                             | 2880 25.0                                                             |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 20:13<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 20:35<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 12:31<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 13:37<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 13:59<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 14:21<br>mg/kg RL                      |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Total TPH                                |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-025<br>Bottomhole-25 (4.5'-5')            | 677578-026<br>Bottomhole-26 (4.5'-5')            | 677578-027<br>Bottomhole-27 (4.5'-5')            | 677578-028<br>Bottomhole-28 (4.5'-5')            | 677578-029<br>Bottomhole-29 (4.5'-5')            | 677578-030<br>Bottomhole-30 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.13.2020 11:00<br>11.13.2020 20:23<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 20:44<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 21:04<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 21:25<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 21:45<br>mg/kg RL | 11.13.2020 11:00<br>11.13.2020 22:06<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| m,p-Xylenes                              |                                                                                          | <0.00399 0.00399                                 | <0.00402 0.00402                                 | <0.00398 0.00398                                 | <0.00400 0.00400                                 | <0.00397 0.00397                                 | <0.00397 0.00397                                 |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00198 0.00198                                 | <0.00198 0.00198                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:30<br>11.12.2020 12:03<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 12:43<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 13:03<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 13:09<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 13:16<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 13:22<br>mg/kg RL |
| Chloride                                 |                                                                                          | 5080 50.3                                        | 3350 24.9                                        | 2000 25.2                                        | 1970 24.8                                        | 3700 25.3                                        | 4000 24.9                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 14:43<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 15:05<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 15:27<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 15:49<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 16:11<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 16:33<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256  
 Contact: Mike Carmona  
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 11.11.2020 15:00  
 Report Date: 11.16.2020 14:16  
 Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-031<br>Bottomhole-31 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-032<br>Bottomhole-32 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-033<br>Bottomhole-33 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-034<br>Bottomhole-34 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-035<br>Bottomhole-35 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-036<br>Bottomhole-36 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 |
|------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.14.2020 07:00<br>11.14.2020 17:08<br>mg/kg RL                      | 11.14.2020 07:00<br>11.14.2020 12:54<br>mg/kg RL                      | 11.14.2020 07:00<br>11.14.2020 13:15<br>mg/kg RL                      | 11.14.2020 07:00<br>11.14.2020 13:36<br>mg/kg RL                      | 11.14.2020 07:00<br>11.14.2020 13:57<br>mg/kg RL                      | 11.14.2020 07:00<br>11.14.2020 14:17<br>mg/kg RL                      |
| Benzene                                  |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Toluene                                  |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Ethylbenzene                             |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| m,p-Xylenes                              |                                                                                          | <0.00397 0.00397                                                      | <0.00399 0.00399                                                      | <0.00397 0.00397                                                      | <0.00402 0.00402                                                      | <0.00401 0.00401                                                      | <0.00400 0.00400                                                      |
| o-Xylene                                 |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Total Xylenes                            |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Total BTEX                               |                                                                                          | <0.00198 0.00198                                                      | <0.00200 0.00200                                                      | <0.00198 0.00198                                                      | <0.00201 0.00201                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:45<br>11.12.2020 13:42<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 13:49<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 13:56<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 14:02<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 14:09<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 14:16<br>mg/kg RL                      |
| Chloride                                 |                                                                                          | 2150 24.8                                                             | 3270 24.8                                                             | 3840 25.1                                                             | 4810 49.9                                                             | 2310 25.2                                                             | 3800 25.0                                                             |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 17:17<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 17:39<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 18:01<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 18:23<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 18:45<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 19:07<br>mg/kg RL                      |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.8 49.8                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.8 49.8                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.8 49.8                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |
| Total TPH                                |                                                                                          | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.8 49.8                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-037<br>Bottomhole-37 (4.5'-5')            | 677578-038<br>Bottomhole-38 (4.5'-5')            | 677578-039<br>Bottomhole-39 (4.5'-5')            | 677578-040<br>Bottomhole-40 (4.5'-5')            | 677578-041<br>Bottomhole-41 (4.5'-5')            | 677578-042<br>Bottomhole-42 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.14.2020 07:00<br>11.14.2020 14:38<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 14:59<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 15:20<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 15:41<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 07:11<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 07:31<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| m,p-Xylenes                              |                                                                                          | <0.00400 0.00400                                 | <0.00402 0.00402                                 | <0.00397 0.00397                                 | <0.00398 0.00398                                 | <0.00400 0.00400                                 | <0.00400 0.00400                                 |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                 | <0.00201 0.00201                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:45<br>11.12.2020 14:36<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 14:42<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 15:22<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 15:29<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 15:35<br>mg/kg RL | 11.12.2020 08:45<br>11.12.2020 15:42<br>mg/kg RL |
| Chloride                                 |                                                                                          | 5830 50.0                                        | 4570 25.3                                        | 2450 25.3                                        | 3950 25.3                                        | 3720 24.8                                        | 3500 25.2                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 19:29<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:51<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 20:13<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 20:35<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 12:43<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 13:41<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

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Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-043<br>Bottomhole-43 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-044<br>Bottomhole-44 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-045<br>Bottomhole-45 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-046<br>Bottomhole-46 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-047<br>Bottomhole-47 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 | 677578-048<br>Bottomhole-48 (4.5'-5')<br><br>SOIL<br>11.10.2020 00:00 |
|------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:32<br>11.13.2020 07:51<br>mg/kg RL                      | 11.12.2020 16:32<br>11.13.2020 08:44<br>mg/kg RL                      | 11.12.2020 16:32<br>11.13.2020 09:04<br>mg/kg RL                      | 11.12.2020 16:32<br>11.13.2020 09:24<br>mg/kg RL                      | 11.12.2020 16:32<br>11.13.2020 09:45<br>mg/kg RL                      | 11.12.2020 16:32<br>11.13.2020 10:05<br>mg/kg RL                      |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| m,p-Xylenes                              |                                                                                          | <0.00400 0.00400                                                      | <0.00400 0.00400                                                      | <0.00400 0.00400                                                      | <0.00400 0.00400                                                      | <0.00400 0.00400                                                      | <0.00400 0.00400                                                      |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      | <0.00200 0.00200                                                      |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 08:45<br>11.12.2020 15:49<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 15:55<br>mg/kg RL                      | 11.12.2020 08:45<br>11.12.2020 16:02<br>mg/kg RL                      | 11.12.2020 16:16<br>11.12.2020 16:42<br>mg/kg RL                      | 11.12.2020 16:16<br>11.12.2020 17:02<br>mg/kg RL                      | 11.12.2020 16:16<br>11.12.2020 17:08<br>mg/kg RL                      |
| Chloride                                 |                                                                                          | 4360 24.8                                                             | 135 25.2                                                              | 5960 49.5                                                             | 4860 X 49.6                                                           | 2420 25.0                                                             | 4840 49.8                                                             |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 14:00<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 14:20<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 14:39<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 14:58<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 15:18<br>mg/kg RL                      | 11.12.2020 10:00<br>11.12.2020 15:37<br>mg/kg RL                      |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <49.9 49.9                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.9 49.9                                                            |
| Diesel Range Organics (DRO)              |                                                                                          | <49.9 49.9                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.9 49.9                                                            |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <49.9 49.9                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.9 49.9                                                            |
| Total TPH                                |                                                                                          | <49.9 49.9                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <50.0 50.0                                                            | <49.9 49.9                                                            | <49.9 49.9                                                            |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256  
 Contact: Mike Carmona  
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 11.11.2020 15:00  
 Report Date: 11.16.2020 14:16  
 Project Manager: Jessica Kramer

| Analysis Requested                 | Lab Id:    | 677578-049              | 677578-050              | 677578-051              | 677578-052              | 677578-053              | 677578-054              |
|------------------------------------|------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                    | Field Id:  | Bottomhole-49 (4.5'-5') | Bottomhole-50 (4.5'-5') | Bottomhole-51 (4.5'-5') | Bottomhole-52 (4.5'-5') | Bottomhole-53 (4.5'-5') | Bottomhole-54 (4.5'-5') |
|                                    | Depth:     |                         |                         |                         |                         |                         |                         |
|                                    | Matrix:    | SOIL                    | SOIL                    | SOIL                    | SOIL                    | SOIL                    | SOIL                    |
|                                    | Sampled:   | 11.10.2020 00:00        | 11.10.2020 00:00        | 11.10.2020 00:00        | 11.10.2020 00:00        | 11.10.2020 00:00        | 11.10.2020 00:00        |
| BTEX by EPA 8021B                  | Extracted: | 11.12.2020 16:32        | 11.12.2020 16:32        | 11.12.2020 16:32        | 11.12.2020 16:32        | 11.12.2020 16:32        | 11.12.2020 16:32        |
|                                    | Analyzed:  | 11.13.2020 10:26        | 11.13.2020 10:46        | 11.13.2020 12:09        | 11.13.2020 12:29        | 11.13.2020 12:50        | 11.13.2020 13:10        |
|                                    | Units/RL:  | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
| Benzene                            |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| Toluene                            |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| Ethylbenzene                       |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| m,p-Xylenes                        |            | <0.00400 0.00400        | <0.00400 0.00400        | <0.00400 0.00400        | <0.00400 0.00400        | <0.00400 0.00400        | <0.00400 0.00400        |
| o-Xylene                           |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| Total Xylenes                      |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| Total BTEX                         |            | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        | <0.00200 0.00200        |
| Inorganic Anions by EPA 300/300.1  | Extracted: | 11.12.2020 16:16        | 11.12.2020 16:16        | 11.12.2020 16:16        | 11.12.2020 16:16        | 11.12.2020 16:16        | 11.12.2020 16:16        |
|                                    | Analyzed:  | 11.12.2020 17:15        | 11.12.2020 17:22        | 11.12.2020 17:42        | 11.12.2020 17:48        | 11.12.2020 17:55        | 11.12.2020 18:02        |
|                                    | Units/RL:  | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
| Chloride                           |            | 3750 25.0               | 2210 25.3               | 2030 25.3               | 4020 25.0               | 3330 24.9               | 3740 25.1               |
| TPH By SW8015 Mod                  | Extracted: | 11.12.2020 10:00        | 11.12.2020 10:00        | 11.12.2020 10:00        | 11.12.2020 10:00        | 11.12.2020 10:00        | 11.12.2020 10:00        |
|                                    | Analyzed:  | 11.12.2020 15:56        | 11.12.2020 16:15        | 11.12.2020 16:54        | 11.12.2020 17:13        | 11.12.2020 17:33        | 11.12.2020 17:52        |
|                                    | Units/RL:  | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
| Gasoline Range Hydrocarbons (GRO)  |            | <49.8 49.8              | <49.9 49.9              | <49.8 49.8              | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              |
| Diesel Range Organics (DRO)        |            | <49.8 49.8              | <49.9 49.9              | <49.8 49.8              | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              |
| Motor Oil Range Hydrocarbons (MRO) |            | <49.8 49.8              | <49.9 49.9              | <49.8 49.8              | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              |
| Total TPH                          |            | <49.8 49.8              | <49.9 49.9              | <49.8 49.8              | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              |

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## Certificate of Analysis Summary 677578

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256  
 Contact: Mike Carmona  
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 11.11.2020 15:00  
 Report Date: 11.16.2020 14:16  
 Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-055<br>Bottomhole-55 (4.5'-5')            | 677578-056<br>Bottomhole-56 (4.5'-5')            | 677578-057<br>Bottomhole-57 (4.5'-5')            | 677578-058<br>Bottomhole-58 (4.5'-5')            | 677578-059<br>Bottomhole-59 (4.5'-5')            | 677578-060<br>Bottomhole-60 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:32<br>11.13.2020 13:31<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 13:51<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 14:11<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 14:32<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 14:52<br>mg/kg RL | 11.12.2020 16:32<br>11.13.2020 15:13<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Toluene                                  |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Ethylbenzene                             |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| m,p-Xylenes                              |                                                                                          | <0.00400 0.00400                                 | <0.00400 0.00400                                 | <0.00400 0.00400                                 | <0.00400 0.00400                                 | <0.00400 0.00400                                 | <0.00400 0.00400                                 |
| o-Xylene                                 |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total Xylenes                            |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total BTEX                               |                                                                                          | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:16<br>11.12.2020 18:08<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 18:15<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 18:35<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 18:41<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 19:01<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 19:08<br>mg/kg RL |
| Chloride                                 |                                                                                          | 3750 25.0                                        | 3240 25.0                                        | 3670 25.2                                        | 3010 24.8                                        | 3510 25.0                                        | 4490 25.0                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 10:00<br>11.12.2020 18:11<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 18:30<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 18:49<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:09<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:28<br>mg/kg RL | 11.12.2020 10:00<br>11.12.2020 19:48<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico





Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-061<br>Bottomhole-61 (4.5'-5')            | 677578-062<br>Bottomhole-62 (4.5'-5')            | 677578-063<br>Bottomhole-63 (4.5'-5')            | 677578-064<br>Bottomhole-64 (4.5'-5')            | 677578-065<br>Bottomhole-65 (4.5'-5')            | 677578-066<br>Bottomhole-66 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.14.2020 07:00<br>11.14.2020 12:33<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 17:29<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 17:50<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 18:10<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 18:31<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 18:52<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Toluene                                  |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Ethylbenzene                             |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| m,p-Xylenes                              |                                                                                          | <0.00396 0.00396                                 | <0.00396 0.00396                                 | <0.00398 0.00398                                 | <0.00403 0.00403                                 | <0.00399 0.00399                                 | <0.00400 0.00400                                 |
| o-Xylene                                 |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total Xylenes                            |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| Total BTEX                               |                                                                                          | <0.00198 0.00198                                 | <0.00198 0.00198                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:16<br>11.12.2020 19:15<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 19:21<br>mg/kg RL | 11.12.2020 16:16<br>11.12.2020 19:28<br>mg/kg RL | 11.12.2020 16:16<br>11.13.2020 08:40<br>mg/kg RL | 11.12.2020 16:16<br>11.13.2020 08:46<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 17:08<br>mg/kg RL |
| Chloride                                 |                                                                                          | 4350 24.8                                        | 208 5.03                                         | 158 5.00                                         | 179 4.95                                         | 183 5.04                                         | 193 4.95                                         |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 13:00<br>11.12.2020 21:24<br>mg/kg RL | 11.12.2020 13:00<br>11.12.2020 22:22<br>mg/kg RL | 11.12.2020 13:00<br>11.12.2020 22:41<br>mg/kg RL | 11.12.2020 13:00<br>11.12.2020 23:00<br>mg/kg RL | 11.12.2020 13:00<br>11.12.2020 23:20<br>mg/kg RL | 11.12.2020 13:00<br>11.12.2020 23:39<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <50.0 50.0                                       | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 677578

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256  
 Contact: Mike Carmona  
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 11.11.2020 15:00  
 Report Date: 11.16.2020 14:16  
 Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-067<br>Bottomhole-67 (4.5'-5')            | 677578-068<br>Bottomhole-68 (4.5'-5')            | 677578-069<br>Bottomhole-69 (4.5'-5')            | 677578-070<br>Bottomhole-70 (4.5'-5')            | 677578-071<br>Bottomhole-71 (4.5'-5')            | 677578-072<br>Bottomhole-72 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.14.2020 07:00<br>11.14.2020 19:13<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 19:33<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 19:54<br>mg/kg RL | 11.14.2020 07:00<br>11.14.2020 20:15<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 13:08<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 13:33<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| Toluene                                  |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| Ethylbenzene                             |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| m,p-Xylenes                              |                                                                                          | <0.00403 0.00403                                 | <0.00402 0.00402                                 | <0.00398 0.00398                                 | <0.00400 0.00400                                 | <0.00398 0.00398                                 | <0.00398 0.00398                                 |
| o-Xylene                                 |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| Total Xylenes                            |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| Total BTEX                               |                                                                                          | <0.00202 0.00202                                 | <0.00201 0.00201                                 | <0.00199 0.00199                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:40<br>11.12.2020 17:23<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 17:29<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 17:34<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 17:39<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 17:55<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:00<br>mg/kg RL |
| Chloride                                 |                                                                                          | 2220 25.2                                        | 2010 25.0                                        | 2210 24.8                                        | 2250 25.0                                        | 1800 24.9                                        | 1110 5.04                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 13:00<br>11.12.2020 23:59<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 00:19<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 00:39<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 00:58<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 01:37<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 01:56<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.9 49.9                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.9 49.9                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.9 49.9                                       |
| Total TPH                                |                                                                                          | <49.9 49.9                                       | <50.0 50.0                                       | <50.0 50.0                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.9 49.9                                       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 677578



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

**Project Id:** 212C-MD-02256  
**Contact:** Mike Carmona  
**Project Location:** Lea County, New Mexico

**Date Received in Lab:** Wed 11.11.2020 15:00  
**Report Date:** 11.16.2020 14:16  
**Project Manager:** Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i><br><i>Field Id:</i><br><i>Depth:</i><br><i>Matrix:</i><br><i>Sampled:</i> | 677578-073<br>Bottomhole-73 (4.5'-5')            | 677578-074<br>Bottomhole-74 (4.5'-5')            | 677578-075<br>Bottomhole-75 (4.5'-5')            | 677578-076<br>Bottomhole-76 (4.5'-5')            | 677578-077<br>Bottomhole-77 (4.5'-5')            | 677578-078<br>Bottomhole-78 (4.5'-5')            |
|------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|--------------------------------------------------|
|                                          |                                                                                          | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             | SOIL                                             |
|                                          |                                                                                          | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 | 11.10.2020 00:00                                 |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.13.2020 10:00<br>11.13.2020 13:58<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 14:23<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 14:48<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 15:14<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 15:39<br>mg/kg RL | 11.13.2020 10:00<br>11.13.2020 16:04<br>mg/kg RL |
| Benzene                                  |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| Toluene                                  |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| Ethylbenzene                             |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| m,p-Xylenes                              |                                                                                          | <0.00404 0.00404                                 | <0.00401 0.00401                                 | <0.00400 0.00400                                 | <0.00398 0.00398                                 | <0.00398 0.00398                                 | <0.00403 0.00403                                 |
| o-Xylene                                 |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| Total Xylenes                            |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| Total BTEX                               |                                                                                          | <0.00202 0.00202                                 | <0.00200 0.00200                                 | <0.00200 0.00200                                 | <0.00199 0.00199                                 | <0.00199 0.00199                                 | <0.00202 0.00202                                 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 16:40<br>11.12.2020 18:06<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:11<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:16<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:21<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:37<br>mg/kg RL | 11.12.2020 16:40<br>11.12.2020 18:42<br>mg/kg RL |
| Chloride                                 |                                                                                          | 958 4.96                                         | 1030 5.03                                        | 966 5.05                                         | 1090 X 5.02                                      | 975 5.00                                         | 1030 4.97                                        |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i><br><i>Analyzed:</i><br><i>Units/RL:</i>                                | 11.12.2020 13:00<br>11.13.2020 02:15<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 02:34<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 02:53<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 03:12<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 03:31<br>mg/kg RL | 11.12.2020 13:00<br>11.13.2020 03:50<br>mg/kg RL |
| Gasoline Range Hydrocarbons (GRO)        |                                                                                          | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Diesel Range Organics (DRO)              |                                                                                          | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Motor Oil Range Hydrocarbons (MRO)       |                                                                                          | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       |
| Total TPH                                |                                                                                          | <49.8 49.8                                       | <50.0 50.0                                       | <49.9 49.9                                       | <49.8 49.8                                       | <50.0 50.0                                       | <50.0 50.0                                       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 677578

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256  
 Contact: Mike Carmona  
 Project Location: Lea County, New Mexico

Date Received in Lab: Wed 11.11.2020 15:00  
 Report Date: 11.16.2020 14:16  
 Project Manager: Jessica Kramer

|                                          |                                                                                                                                                   |                                                                                                                                                   |  |  |  |  |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| <b>Analysis Requested</b>                | <b>Lab Id:</b> 677578-079<br><b>Field Id:</b> Bottomhole-79 (4.5'-5')<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 11.10.2020 00:00 | <b>Lab Id:</b> 677578-080<br><b>Field Id:</b> Bottomhole-80 (4.5'-5')<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 11.10.2020 00:00 |  |  |  |  |
| <b>BTEX by EPA 8021B</b>                 | <b>Extracted:</b> 11.13.2020 10:00<br><b>Analyzed:</b> 11.13.2020 16:29<br><b>Units/RL:</b> mg/kg RL                                              | <b>Extracted:</b> 11.13.2020 10:00<br><b>Analyzed:</b> 11.13.2020 16:54<br><b>Units/RL:</b> mg/kg RL                                              |  |  |  |  |
| Benzene                                  | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| Toluene                                  | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| Ethylbenzene                             | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| m,p-Xylenes                              | <0.00402 0.00402                                                                                                                                  | <0.00398 0.00398                                                                                                                                  |  |  |  |  |
| o-Xylene                                 | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| Total Xylenes                            | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| Total BTEX                               | <0.00201 0.00201                                                                                                                                  | <0.00199 0.00199                                                                                                                                  |  |  |  |  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <b>Extracted:</b> 11.12.2020 16:40<br><b>Analyzed:</b> 11.12.2020 18:58<br><b>Units/RL:</b> mg/kg RL                                              | <b>Extracted:</b> 11.12.2020 16:40<br><b>Analyzed:</b> 11.12.2020 19:04<br><b>Units/RL:</b> mg/kg RL                                              |  |  |  |  |
| Chloride                                 | 1040 5.02                                                                                                                                         | 1040 5.00                                                                                                                                         |  |  |  |  |
| <b>TPH By SW8015 Mod</b>                 | <b>Extracted:</b> 11.12.2020 13:00<br><b>Analyzed:</b> 11.13.2020 04:08<br><b>Units/RL:</b> mg/kg RL                                              | <b>Extracted:</b> 11.12.2020 13:00<br><b>Analyzed:</b> 11.13.2020 04:27<br><b>Units/RL:</b> mg/kg RL                                              |  |  |  |  |
| Gasoline Range Hydrocarbons (GRO)        | <49.8 49.8                                                                                                                                        | <49.9 49.9                                                                                                                                        |  |  |  |  |
| Diesel Range Organics (DRO)              | <49.8 49.8                                                                                                                                        | <49.9 49.9                                                                                                                                        |  |  |  |  |
| Motor Oil Range Hydrocarbons (MRO)       | <49.8 49.8                                                                                                                                        | <49.9 49.9                                                                                                                                        |  |  |  |  |
| Total TPH                                | <49.8 49.8                                                                                                                                        | <49.9 49.9                                                                                                                                        |  |  |  |  |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



# Analytical Report 677578

for

**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Caballo Riser**

**212C-MD-02256**

**11.16.2020**

Collected By: Client



**1211 W. Florida Ave  
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.16.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **677578**

**Caballo Riser**

Project Address: Lea County, New Mexico

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 677578. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 677578 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

---

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Sample Cross Reference 677578

## Tetra Tech- Midland, Midland, TX

## Caballo Riser

| Sample Id               | Matrix | Date Collected   | Sample Depth | Lab Sample Id |
|-------------------------|--------|------------------|--------------|---------------|
| Bottomhole-1 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-001    |
| Bottomhole-2 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-002    |
| Bottomhole-3 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-003    |
| Bottomhole-4 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-004    |
| Bottomhole-5 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-005    |
| Bottomhole-6 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-006    |
| Bottomhole-7 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-007    |
| Bottomhole-8 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-008    |
| Bottomhole-9 (4.5'-5')  | S      | 11.10.2020 00:00 |              | 677578-009    |
| Bottomhole-10 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-010    |
| Bottomhole-11 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-011    |
| Bottomhole-12 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-012    |
| Bottomhole-13 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-013    |
| Bottomhole-14 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-014    |
| Bottomhole-15 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-015    |
| Bottomhole-16 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-016    |
| Bottomhole-17 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-017    |
| Bottomhole-18 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-018    |
| Bottomhole-19 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-019    |
| Bottomhole-20 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-020    |
| Bottomhole-21 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-021    |
| Bottomhole-22 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-022    |
| Bottomhole-23 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-023    |
| Bottomhole-24 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-024    |
| Bottomhole-25 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-025    |
| Bottomhole-26 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-026    |
| Bottomhole-27 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-027    |
| Bottomhole-28 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-028    |
| Bottomhole-29 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-029    |
| Bottomhole-30 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-030    |
| Bottomhole-31 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-031    |
| Bottomhole-32 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-032    |
| Bottomhole-33 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-033    |
| Bottomhole-34 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-034    |
| Bottomhole-35 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-035    |
| Bottomhole-36 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-036    |
| Bottomhole-37 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-037    |
| Bottomhole-38 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-038    |
| Bottomhole-39 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-039    |
| Bottomhole-40 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-040    |
| Bottomhole-41 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-041    |
| Bottomhole-42 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-042    |
| Bottomhole-43 (4.5'-5') | S      | 11.10.2020 00:00 |              | 677578-043    |



## Sample Cross Reference 677578

## Tetra Tech- Midland, Midland, TX

## Caballo Riser

|                         |   |                  |            |
|-------------------------|---|------------------|------------|
| Bottomhole-44 (4.5'-5') | S | 11.10.2020 00:00 | 677578-044 |
| Bottomhole-45 (4.5'-5') | S | 11.10.2020 00:00 | 677578-045 |
| Bottomhole-46 (4.5'-5') | S | 11.10.2020 00:00 | 677578-046 |
| Bottomhole-47 (4.5'-5') | S | 11.10.2020 00:00 | 677578-047 |
| Bottomhole-48 (4.5'-5') | S | 11.10.2020 00:00 | 677578-048 |
| Bottomhole-49 (4.5'-5') | S | 11.10.2020 00:00 | 677578-049 |
| Bottomhole-50 (4.5'-5') | S | 11.10.2020 00:00 | 677578-050 |
| Bottomhole-51 (4.5'-5') | S | 11.10.2020 00:00 | 677578-051 |
| Bottomhole-52 (4.5'-5') | S | 11.10.2020 00:00 | 677578-052 |
| Bottomhole-53 (4.5'-5') | S | 11.10.2020 00:00 | 677578-053 |
| Bottomhole-54 (4.5'-5') | S | 11.10.2020 00:00 | 677578-054 |
| Bottomhole-55 (4.5'-5') | S | 11.10.2020 00:00 | 677578-055 |
| Bottomhole-56 (4.5'-5') | S | 11.10.2020 00:00 | 677578-056 |
| Bottomhole-57 (4.5'-5') | S | 11.10.2020 00:00 | 677578-057 |
| Bottomhole-58 (4.5'-5') | S | 11.10.2020 00:00 | 677578-058 |
| Bottomhole-59 (4.5'-5') | S | 11.10.2020 00:00 | 677578-059 |
| Bottomhole-60 (4.5'-5') | S | 11.10.2020 00:00 | 677578-060 |
| Bottomhole-61(4.5'-5')  | S | 11.10.2020 00:00 | 677578-061 |
| Bottomhole-62 (4.5'-5') | S | 11.10.2020 00:00 | 677578-062 |
| Bottomhole-63 (4.5'-5') | S | 11.10.2020 00:00 | 677578-063 |
| Bottomhole-64 (4.5'-5') | S | 11.10.2020 00:00 | 677578-064 |
| Bottomhole-65 (4.5'-5') | S | 11.10.2020 00:00 | 677578-065 |
| Bottomhole-66 (4.5'-5') | S | 11.10.2020 00:00 | 677578-066 |
| Bottomhole-67 (4.5'-5') | S | 11.10.2020 00:00 | 677578-067 |
| Bottomhole-68 (4.5'-5') | S | 11.10.2020 00:00 | 677578-068 |
| Bottomhole-69 (4.5'-5') | S | 11.10.2020 00:00 | 677578-069 |
| Bottomhole-70 (4.5'-5') | S | 11.10.2020 00:00 | 677578-070 |
| Bottomhole-71 (4.5'-5') | S | 11.10.2020 00:00 | 677578-071 |
| Bottomhole-72 (4.5'-5') | S | 11.10.2020 00:00 | 677578-072 |
| Bottomhole-73 (4.5'-5') | S | 11.10.2020 00:00 | 677578-073 |
| Bottomhole-74 (4.5'-5') | S | 11.10.2020 00:00 | 677578-074 |
| Bottomhole-75 (4.5'-5') | S | 11.10.2020 00:00 | 677578-075 |
| Bottomhole-76 (4.5'-5') | S | 11.10.2020 00:00 | 677578-076 |
| Bottomhole-77 (4.5'-5') | S | 11.10.2020 00:00 | 677578-077 |
| Bottomhole-78 (4.5'-5') | S | 11.10.2020 00:00 | 677578-078 |
| Bottomhole-79 (4.5'-5') | S | 11.10.2020 00:00 | 677578-079 |
| Bottomhole-80 (4.5'-5') | S | 11.10.2020 00:00 | 677578-080 |

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Caballo Riser**Project ID: 212C-MD-02256  
Work Order Number(s): 677578Report Date: 11.16.2020  
Date Received: 11.11.2020**Sample receipt non conformances and comments:****Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3142128 BTEX by EPA 8021B

Lab Sample ID 677578-001 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 677578-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 677578-001, -002, -003, -004, -005, -006, -007, -008, -009, -010

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected. Samples affected are: 677578-006, 677578-002.

Batch: LBA-3142156 Inorganic Anions by EPA 300/300.1

Lab Sample ID 677578-016 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 677578-006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3142160 Inorganic Anions by EPA 300/300.1

Lab Sample ID 677578-056 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 677578-046, -047, -048, -049, -050, -051, -052, -053, -054, -055, -056, -057, -058, -059, -060, -061, -062, -063, -064, -065.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Caballo Riser**

Project ID: 212C-MD-02256  
Work Order Number(s): 677578

Report Date: 11.16.2020  
Date Received: 11.11.2020

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Batch: LBA-3142205 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 677578-031, 677578-030.

Batch: LBA-3142225 Inorganic Anions by EPA 300/300.1

Lab Sample ID 677578-076 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 677578-066, -067, -068, -069, -070, -071, -072, -073, -074, -075, -076, -077, -078, -079, -080.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3142237 BTEX by EPA 8021B

Lab Sample ID 677578-041 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3142271 BTEX by EPA 8021B

Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene Relative Percent Difference (RPD) between matrix spike and duplicate were above quality control limits.

Samples in the analytical batch are: 677578-011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030

Lab Sample ID 677578-021 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 677578-011, -012, -013, -014, -015, -016, -017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-1 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-001 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.11.2020 16:50 % Moisture:  
 Seq Number: 3142023 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8370   | 50.2 | mg/kg | 11.11.2020 23:04 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 111               | %            | 70-130        | 11.12.2020 12:31     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.12.2020 12:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-1 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-001

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | UXF         | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | UXF         | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | UXF         | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 11.12.2020 19:39     | UXF         | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | UXF         | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.12.2020 19:39     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 79                | %            | 70-130        | 11.12.2020 19:39     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 127               | %            | 70-130        | 11.12.2020 19:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-2 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-002 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.11.2020 16:50 % Moisture:  
 Seq Number: 3142023 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8000   | 50.0 | mg/kg | 11.11.2020 23:10 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 111               | %            | 70-130        | 11.12.2020 13:37     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.12.2020 13:37     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-2 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-002

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 20:05     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 73                | %            | 70-130        | 11.12.2020 20:05     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 61                | %            | 70-130        | 11.12.2020 20:05     | **          |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-3 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-003 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.11.2020 16:50 % Moisture:  
 Seq Number: 3142023 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6160   | 50.0 | mg/kg | 11.11.2020 23:15 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 109               | %            | 70-130        | 11.12.2020 13:59     |             |     |
| o-Terphenyl                        | 84-15-1           | 96                | %            | 70-130        | 11.12.2020 13:59     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-3 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-003

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:30     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 109               | %            | 70-130        | 11.12.2020 20:30     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.12.2020 20:30     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-4 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-004 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.11.2020 16:50 % Moisture:  
 Seq Number: 3142023 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8600   | 50.0 | mg/kg | 11.11.2020 23:20 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 115               | %            | 70-130        | 11.12.2020 14:21     |             |     |
| o-Terphenyl                        | 84-15-1           | 103               | %            | 70-130        | 11.12.2020 14:21     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-4 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-004

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 20:55     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.12.2020 20:55     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 109               | %            | 70-130        | 11.12.2020 20:55     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-5 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-005 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.11.2020 16:50 % Moisture:  
 Seq Number: 3142023 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6290   | 50.0 | mg/kg | 11.11.2020 23:25 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:43     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:43     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:43     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:43     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 109               | %            | 70-130        | 11.12.2020 14:43     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.12.2020 14:43     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-5 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-005

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 21:21     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.12.2020 21:21     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.12.2020 21:21     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-6 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-006 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4180   | 25.1 | mg/kg | 11.12.2020 09:03 | X    | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 101               | %            | 70-130        | 11.12.2020 15:05     |             |     |
| o-Terphenyl                        | 84-15-1           | 94                | %            | 70-130        | 11.12.2020 15:05     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-6 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-006

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.12.2020 21:46     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 66                | %            | 70-130        | 11.12.2020 21:46     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 11.12.2020 21:46     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-7 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-007 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3200   | 24.8 | mg/kg | 11.12.2020 09:23 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 109               | %            | 70-130        | 11.12.2020 15:27     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.12.2020 15:27     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-7 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-007

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.12.2020 22:12     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 124               | %            | 70-130        | 11.12.2020 22:12     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.12.2020 22:12     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-8 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-008 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3610   | 25.0 | mg/kg | 11.12.2020 09:30 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 103               | %            | 70-130        | 11.12.2020 15:49     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.12.2020 15:49     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-8 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-008

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 22:38     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.12.2020 22:38     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 126               | %            | 70-130        | 11.12.2020 22:38     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-9 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-009 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4150   | 25.2 | mg/kg | 11.12.2020 09:37 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.12.2020 16:11     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.12.2020 16:11     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-9 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-009

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142128

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:03     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.12.2020 23:03     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.12.2020 23:03     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-10 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-010 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4100   | 25.0 | mg/kg | 11.12.2020 09:43 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 101               | %            | 70-130        | 11.12.2020 16:33     |             |     |
| o-Terphenyl                        | 84-15-1           | 95                | %            | 70-130        | 11.12.2020 16:33     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-10 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-010

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.12.2020 15:00

% Moisture:

Seq Number: 3142128

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.12.2020 23:28     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.12.2020 23:28     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 123               | %            | 70-130        | 11.12.2020 23:28     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-11 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-011 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3810   | 25.0 | mg/kg | 11.12.2020 10:03 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 99                | %            | 70-130        | 11.12.2020 17:17     |             |     |
| o-Terphenyl                        | 84-15-1           | 88                | %            | 70-130        | 11.12.2020 17:17     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-11 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-011

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:01     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 103               | %            | 70-130        | 11.13.2020 19:01     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 97                | %            | 70-130        | 11.13.2020 19:01     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-12 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-012

Date Collected: 11.10.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.12.2020 08:30

% Moisture:

Seq Number: 3142156

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4340   | 25.0 | mg/kg | 11.12.2020 10:10 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.12.2020 10:00

% Moisture:

Seq Number: 3142201

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.12.2020 17:39     |             |     |
| o-Terphenyl                        | 84-15-1           | 85                | %            | 70-130        | 11.12.2020 17:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-12 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-012

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:53     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 70-130        | 11.13.2020 14:53     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 107               | %            | 70-130        | 11.13.2020 14:53     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-13 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-013 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3460   | 25.0 | mg/kg | 11.12.2020 10:16 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.12.2020 18:01     |             |     |
| o-Terphenyl                        | 84-15-1           | 86                | %            | 70-130        | 11.12.2020 18:01     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-13 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-013

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 15:13     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 116               | %            | 70-130        | 11.13.2020 15:13     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-14 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-014 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2890   | 25.1 | mg/kg | 11.12.2020 10:23 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.12.2020 18:23     |             |     |
| o-Terphenyl                        | 84-15-1           | 86                | %            | 70-130        | 11.12.2020 18:23     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-14 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-014

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:34     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.13.2020 15:34     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 107               | %            | 70-130        | 11.13.2020 15:34     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-15 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-015 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2780   | 25.3 | mg/kg | 11.12.2020 10:30 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.12.2020 18:45     |             |     |
| o-Terphenyl                        | 84-15-1           | 89                | %            | 70-130        | 11.12.2020 18:45     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-15 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-015

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 105               | %            | 70-130        | 11.13.2020 15:54     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 108               | %            | 70-130        | 11.13.2020 15:54     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-16 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-016 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2920   | 24.8 | mg/kg | 11.12.2020 10:36 | X    | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 99                | %            | 70-130        | 11.12.2020 19:07     |             |     |
| o-Terphenyl                        | 84-15-1           | 89                | %            | 70-130        | 11.12.2020 19:07     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-16 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-016

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:15     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 105               | %            | 70-130        | 11.13.2020 16:15     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 106               | %            | 70-130        | 11.13.2020 16:15     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-17 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-017 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3040   | 24.8 | mg/kg | 11.12.2020 10:56 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 97                | %            | 70-130        | 11.12.2020 19:29     |             |     |
| o-Terphenyl                        | 84-15-1           | 88                | %            | 70-130        | 11.12.2020 19:29     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-17 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-017

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:36     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.13.2020 16:36     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 11.13.2020 16:36     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-18 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-018 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2820   | 25.2 | mg/kg | 11.12.2020 11:03 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 103               | %            | 70-130        | 11.12.2020 19:51     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.12.2020 19:51     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-18 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-018

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 16:56     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.13.2020 16:56     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 108               | %            | 70-130        | 11.13.2020 16:56     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-19 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-019 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2840   | 24.9 | mg/kg | 11.12.2020 11:23 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.12.2020 20:13     |             |     |
| o-Terphenyl                        | 84-15-1           | 91                | %            | 70-130        | 11.12.2020 20:13     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-19 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-019

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 17:17     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 93                | %            | 70-130        | 11.13.2020 17:17     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 11.13.2020 17:17     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-20 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-020 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2780   | 25.0 | mg/kg | 11.12.2020 11:30 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142201 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 97                | %            | 70-130        | 11.12.2020 20:35     |             |     |
| o-Terphenyl                        | 84-15-1           | 95                | %            | 70-130        | 11.12.2020 20:35     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-20 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-020

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 17:37     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 11.13.2020 17:37     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.13.2020 17:37     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-21 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-021 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3300   | 25.1 | mg/kg | 11.12.2020 11:36 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:31     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 117               | %            | 70-130        | 11.12.2020 12:31     |             |     |
| o-Terphenyl                        | 84-15-1           | 124               | %            | 70-130        | 11.12.2020 12:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-21 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-021

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | UXF         | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | UXF         | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | UXF         | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 11.13.2020 14:32     | UXF         | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | UXF         | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 92                | %            | 70-130        | 11.13.2020 14:32     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 94                | %            | 70-130        | 11.13.2020 14:32     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-22 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-022 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3020   | 24.8 | mg/kg | 11.12.2020 11:43 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 13:37     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 118               | %            | 70-130        | 11.12.2020 13:37     |             |     |
| o-Terphenyl                        | 84-15-1           | 124               | %            | 70-130        | 11.12.2020 13:37     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-22 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-022

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:21     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.13.2020 19:21     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 103               | %            | 70-130        | 11.13.2020 19:21     |             |     |

## Certificate of Analytical Results 677578

 Tetra Tech- Midland, Midland, TX  
 Caballo Riser

Sample Id: **Bottomhole-23 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-023 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3630   | 24.8 | mg/kg | 11.12.2020 11:49 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:59     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 120               | %            | 70-130        | 11.12.2020 13:59     |             |     |
| o-Terphenyl                        | 84-15-1           | 126               | %            | 70-130        | 11.12.2020 13:59     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-23 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-023

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 19:42     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 11.13.2020 19:42     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.13.2020 19:42     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-24 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-024 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:30 % Moisture:  
 Seq Number: 3142156 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2880   | 25.0 | mg/kg | 11.12.2020 11:56 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:21     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 113               | %            | 70-130        | 11.12.2020 14:21     |             |     |
| o-Terphenyl                        | 84-15-1           | 117               | %            | 70-130        | 11.12.2020 14:21     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-24 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-024

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142271

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 20:02     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 106               | %            | 70-130        | 11.13.2020 20:02     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.13.2020 20:02     |             |     |

## Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX

## Caballo Riser

Sample Id: **Bottomhole-25 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-025

Date Collected: 11.10.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.12.2020 08:30

% Moisture:

Seq Number: 3142156

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5080   | 50.3 | mg/kg | 11.12.2020 12:03 |      | 10  |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.12.2020 10:00

% Moisture:

Seq Number: 3142205

Basis: Wet Weight

| Parameter                          | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|------------------------------------|------------|--------|------|-------|------------------|------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610     | <50.0  | 50.0 | mg/kg | 11.12.2020 14:43 | U    | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO  | <50.0  | 50.0 | mg/kg | 11.12.2020 14:43 | U    | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835   | <50.0  | 50.0 | mg/kg | 11.12.2020 14:43 | U    | 1   |
| Total TPH                          | PHC635     | <50.0  | 50.0 | mg/kg | 11.12.2020 14:43 | U    | 1   |

| Surrogate      | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------|------------|------------|-------|--------|------------------|------|
| 1-Chlorooctane | 111-85-3   | 113        | %     | 70-130 | 11.12.2020 14:43 |      |
| o-Terphenyl    | 84-15-1    | 118        | %     | 70-130 | 11.12.2020 14:43 |      |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-25 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-025

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142271

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 20:23     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 105               | %            | 70-130        | 11.13.2020 20:23     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 11.13.2020 20:23     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-26 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-026 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3350   | 24.9 | mg/kg | 11.12.2020 12:43 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:05     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 117               | %            | 70-130        | 11.12.2020 15:05     |             |     |
| o-Terphenyl                        | 84-15-1           | 124               | %            | 70-130        | 11.12.2020 15:05     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-26 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-026

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142271

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 20:44     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 107               | %            | 70-130        | 11.13.2020 20:44     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.13.2020 20:44     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-27 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-027 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2000   | 25.2 | mg/kg | 11.12.2020 13:03 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 15:27     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 112               | %            | 70-130        | 11.12.2020 15:27     |             |     |
| o-Terphenyl                        | 84-15-1           | 117               | %            | 70-130        | 11.12.2020 15:27     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-27 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-027

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 21:04     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 108               | %            | 70-130        | 11.13.2020 21:04     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 108               | %            | 70-130        | 11.13.2020 21:04     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-28 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-028 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1970   | 24.8 | mg/kg | 11.12.2020 13:09 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:49     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 117               | %            | 70-130        | 11.12.2020 15:49     |             |     |
| o-Terphenyl                        | 84-15-1           | 125               | %            | 70-130        | 11.12.2020 15:49     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-28 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-028

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 21:25     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.13.2020 21:25     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.13.2020 21:25     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-29 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-029 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3700   | 25.3 | mg/kg | 11.12.2020 13:16 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:11     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 121               | %            | 70-130        | 11.12.2020 16:11     |             |     |
| o-Terphenyl                        | 84-15-1           | 128               | %            | 70-130        | 11.12.2020 16:11     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-29 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-029

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 21:45     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 106               | %            | 70-130        | 11.13.2020 21:45     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 106               | %            | 70-130        | 11.13.2020 21:45     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-30 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-030 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4000   | 24.9 | mg/kg | 11.12.2020 13:22 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 16:33     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 126               | %            | 70-130        | 11.12.2020 16:33     |             |     |
| o-Terphenyl                        | 84-15-1           | 136               | %            | 70-130        | 11.12.2020 16:33     | **          |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-30 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-030

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 11:00

% Moisture:

Seq Number: 3142271

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.13.2020 22:06     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 106               | %            | 70-130        | 11.13.2020 22:06     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 106               | %            | 70-130        | 11.13.2020 22:06     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-31 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-031 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2150   | 24.8 | mg/kg | 11.12.2020 13:42 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:17     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 129               | %            | 70-130        | 11.12.2020 17:17     |             |     |
| o-Terphenyl                        | 84-15-1           | 137               | %            | 70-130        | 11.12.2020 17:17     | **          |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-31 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-031

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:08     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.14.2020 17:08     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 92                | %            | 70-130        | 11.14.2020 17:08     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-32 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-032 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3270   | 24.8 | mg/kg | 11.12.2020 13:49 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:39     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 118               | %            | 70-130        | 11.12.2020 17:39     |             |     |
| o-Terphenyl                        | 84-15-1           | 125               | %            | 70-130        | 11.12.2020 17:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-32 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-032

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 12:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 98                | %            | 70-130        | 11.14.2020 12:54     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.14.2020 12:54     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-33 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-033 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3840   | 25.1 | mg/kg | 11.12.2020 13:56 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:01     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 119               | %            | 70-130        | 11.12.2020 18:01     |             |     |
| o-Terphenyl                        | 84-15-1           | 128               | %            | 70-130        | 11.12.2020 18:01     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-33 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-033

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 13:15     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 11.14.2020 13:15     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 11.14.2020 13:15     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-34 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-034 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4810   | 49.9 | mg/kg | 11.12.2020 14:02 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:23     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 115               | %            | 70-130        | 11.12.2020 18:23     |             |     |
| o-Terphenyl                        | 84-15-1           | 122               | %            | 70-130        | 11.12.2020 18:23     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-34 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-034

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 13:36     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 103               | %            | 70-130        | 11.14.2020 13:36     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 113               | %            | 70-130        | 11.14.2020 13:36     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-35 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-035 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2310   | 25.2 | mg/kg | 11.12.2020 14:09 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:45     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 115               | %            | 70-130        | 11.12.2020 18:45     |             |     |
| o-Terphenyl                        | 84-15-1           | 122               | %            | 70-130        | 11.12.2020 18:45     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-35 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-035

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 13:57     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 11.14.2020 13:57     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.14.2020 13:57     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-36 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-036 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3800   | 25.0 | mg/kg | 11.12.2020 14:16 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:07     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 120               | %            | 70-130        | 11.12.2020 19:07     |             |     |
| o-Terphenyl                        | 84-15-1           | 126               | %            | 70-130        | 11.12.2020 19:07     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-36 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-036

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:17     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 101               | %            | 70-130        | 11.14.2020 14:17     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 112               | %            | 70-130        | 11.14.2020 14:17     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-37 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-037 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5830   | 50.0 | mg/kg | 11.12.2020 14:36 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:29     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 114               | %            | 70-130        | 11.12.2020 19:29     |             |     |
| o-Terphenyl                        | 84-15-1           | 119               | %            | 70-130        | 11.12.2020 19:29     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-37 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-037

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 14:38     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.14.2020 14:38     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 115               | %            | 70-130        | 11.14.2020 14:38     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-38 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-038 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4570   | 25.3 | mg/kg | 11.12.2020 14:42 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:51     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 116               | %            | 70-130        | 11.12.2020 19:51     |             |     |
| o-Terphenyl                        | 84-15-1           | 122               | %            | 70-130        | 11.12.2020 19:51     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-38 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-038

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 14:59     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 104               | %            | 70-130        | 11.14.2020 14:59     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 115               | %            | 70-130        | 11.14.2020 14:59     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-39 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-039 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2450   | 25.3 | mg/kg | 11.12.2020 15:22 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 20:13     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 119               | %            | 70-130        | 11.12.2020 20:13     |             |     |
| o-Terphenyl                        | 84-15-1           | 123               | %            | 70-130        | 11.12.2020 20:13     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-39 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-039

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 15:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 11.14.2020 15:20     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.14.2020 15:20     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-40 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-040 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3950   | 25.3 | mg/kg | 11.12.2020 15:29 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142205 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 20:35     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 116               | %            | 70-130        | 11.12.2020 20:35     |             |     |
| o-Terphenyl                        | 84-15-1           | 121               | %            | 70-130        | 11.12.2020 20:35     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-40 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-040

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 15:41     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.14.2020 15:41     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 11.14.2020 15:41     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-41 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-041 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3720   | 24.8 | mg/kg | 11.12.2020 15:35 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:43     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:43     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:43     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 12:43     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 92                | %            | 70-130        | 11.12.2020 12:43     |             |     |
| o-Terphenyl                        | 84-15-1           | 108               | %            | 70-130        | 11.12.2020 12:43     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-41 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-041

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | UX          | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | UX          | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | UX          | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 07:11     | UX          | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | UX          | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.13.2020 07:11     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 07:11     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-42 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-042 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3500   | 25.2 | mg/kg | 11.12.2020 15:42 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:41     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:41     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:41     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 13:41     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.12.2020 13:41     |             |     |
| o-Terphenyl                        | 84-15-1           | 105               | %            | 70-130        | 11.12.2020 13:41     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-42 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-042

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:31     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 07:31     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.13.2020 07:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-43 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-043 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4360   | 24.8 | mg/kg | 11.12.2020 15:49 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:00     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:00     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:00     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 14:00     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.12.2020 14:00     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.12.2020 14:00     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-43 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-043

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 07:51     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.13.2020 07:51     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 07:51     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-44 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-044 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 135    | 25.2 | mg/kg | 11.12.2020 15:55 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:20     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:20     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:20     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:20     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.12.2020 14:20     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.12.2020 14:20     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-44 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-044

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:  
Basis: Wet Weight

Seq Number: 3142237

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 08:44     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 08:44     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 123               | %            | 70-130        | 11.13.2020 08:44     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-45 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-045 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 08:45 % Moisture:  
 Seq Number: 3142158 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5960   | 49.5 | mg/kg | 11.12.2020 16:02 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:39     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:39     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:39     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:39     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 85                | %            | 70-130        | 11.12.2020 14:39     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.12.2020 14:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-45 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-045

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:  
Basis: Wet Weight

Seq Number: 3142237

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:04     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 94                | %            | 70-130        | 11.13.2020 09:04     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.13.2020 09:04     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-46 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-046 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4860   | 49.6 | mg/kg | 11.12.2020 16:42 | X    | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:58     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:58     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:58     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 14:58     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 85                | %            | 70-130        | 11.12.2020 14:58     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.12.2020 14:58     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-46 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-046

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:24     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.13.2020 09:24     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.13.2020 09:24     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-47 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-047 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2420   | 25.0 | mg/kg | 11.12.2020 17:02 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:18     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:18     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:18     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:18     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.12.2020 15:18     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.12.2020 15:18     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-47 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-047

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 09:45     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 113               | %            | 70-130        | 11.13.2020 09:45     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 09:45     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-48 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-048 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4840   | 49.8 | mg/kg | 11.12.2020 17:08 |      | 10  |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:37     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:37     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:37     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 15:37     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.12.2020 15:37     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.12.2020 15:37     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-48 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-048

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:05     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.13.2020 10:05     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 101               | %            | 70-130        | 11.13.2020 10:05     |             |     |



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## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-49 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-049 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3750   | 25.0 | mg/kg | 11.12.2020 17:15 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:56     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:56     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:56     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 15:56     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 102               | %            | 70-130        | 11.12.2020 15:56     |             |     |
| o-Terphenyl                        | 84-15-1           | 121               | %            | 70-130        | 11.12.2020 15:56     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-49 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-049

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:26     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 11.13.2020 10:26     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 10:26     |             |     |



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## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-50 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-050 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2210   | 25.3 | mg/kg | 11.12.2020 17:22 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:15     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:15     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:15     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 16:15     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 94                | %            | 70-130        | 11.12.2020 16:15     |             |     |
| o-Terphenyl                        | 84-15-1           | 110               | %            | 70-130        | 11.12.2020 16:15     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-50 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-050

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 10:46     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 10:46     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.13.2020 10:46     |             |     |



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## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-51 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-051 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2030   | 25.3 | mg/kg | 11.12.2020 17:42 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:54     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:54     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:54     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 16:54     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 84                | %            | 70-130        | 11.12.2020 16:54     |             |     |
| o-Terphenyl                        | 84-15-1           | 98                | %            | 70-130        | 11.12.2020 16:54     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-51 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-051

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:09     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.13.2020 12:09     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.13.2020 12:09     |             |     |



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## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-52 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-052 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4020   | 25.0 | mg/kg | 11.12.2020 17:48 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:13     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:13     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:13     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:13     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.12.2020 17:13     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.12.2020 17:13     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-52 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-052

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:29     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.13.2020 12:29     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.13.2020 12:29     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-53 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-053 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3330   | 24.9 | mg/kg | 11.12.2020 17:55 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:33     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:33     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:33     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 17:33     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 85                | %            | 70-130        | 11.12.2020 17:33     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.12.2020 17:33     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-53 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-053

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 12:50     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 12:50     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 11.13.2020 12:50     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-54 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-054 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3740   | 25.1 | mg/kg | 11.12.2020 18:02 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:52     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:52     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:52     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 17:52     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.12.2020 17:52     |             |     |
| o-Terphenyl                        | 84-15-1           | 112               | %            | 70-130        | 11.12.2020 17:52     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-54 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-054

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:10     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 116               | %            | 70-130        | 11.13.2020 13:10     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 92                | %            | 70-130        | 11.13.2020 13:10     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-55 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-055 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3750   | 25.0 | mg/kg | 11.12.2020 18:08 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:11     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:11     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:11     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 18:11     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.12.2020 18:11     |             |     |
| o-Terphenyl                        | 84-15-1           | 103               | %            | 70-130        | 11.12.2020 18:11     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-55 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-055

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:31     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 13:31     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 11.13.2020 13:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-56 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-056 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3240   | 25.0 | mg/kg | 11.12.2020 18:15 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:30     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:30     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:30     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 18:30     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 94                | %            | 70-130        | 11.12.2020 18:30     |             |     |
| o-Terphenyl                        | 84-15-1           | 111               | %            | 70-130        | 11.12.2020 18:30     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-56 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-056

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 13:51     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 11.13.2020 13:51     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 13:51     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-57 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-057 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3670   | 25.2 | mg/kg | 11.12.2020 18:35 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:49     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:49     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:49     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 18:49     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.12.2020 18:49     |             |     |
| o-Terphenyl                        | 84-15-1           | 106               | %            | 70-130        | 11.12.2020 18:49     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-57 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-057

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.13.2020 14:11     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 114               | %            | 70-130        | 11.13.2020 14:11     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-58 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-058

Date Collected: 11.10.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.12.2020 16:16

% Moisture:

Seq Number: 3142160

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3010   | 24.8 | mg/kg | 11.12.2020 18:41 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.12.2020 10:00

% Moisture:

Seq Number: 3142208

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:09     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:09     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:09     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:09     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 84                | %            | 70-130        | 11.12.2020 19:09     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.12.2020 19:09     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-58 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-058

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:32     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 116               | %            | 70-130        | 11.13.2020 14:32     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.13.2020 14:32     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-59 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-059 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 3510   | 25.0 | mg/kg | 11.12.2020 19:01 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:28     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:28     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:28     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 19:28     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.12.2020 19:28     |             |     |
| o-Terphenyl                        | 84-15-1           | 103               | %            | 70-130        | 11.12.2020 19:28     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-59 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-059

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:52     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.13.2020 14:52     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 110               | %            | 70-130        | 11.13.2020 14:52     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-60 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-060 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4490   | 25.0 | mg/kg | 11.12.2020 19:08 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 10:00 % Moisture:  
 Seq Number: 3142208 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:48     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:48     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:48     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 19:48     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.12.2020 19:48     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.12.2020 19:48     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-60 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-060

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: MNR

Analyst: MNR

Date Prep: 11.12.2020 16:32

% Moisture:

Seq Number: 3142237

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 15:13     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 96                | %            | 70-130        | 11.13.2020 15:13     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.13.2020 15:13     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-61(4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-061 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 4350   | 24.8 | mg/kg | 11.12.2020 19:15 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 21:24     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 21:24     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 21:24     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 21:24     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.12.2020 21:24     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.12.2020 21:24     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-61(4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-061

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 12:33     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 95                | %            | 70-130        | 11.14.2020 12:33     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.14.2020 12:33     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-62 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-062 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 208    | 5.03 | mg/kg | 11.12.2020 19:21 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.12.2020 22:22     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.12.2020 22:22     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.12.2020 22:22     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.12.2020 22:22     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 92                | %            | 70-130        | 11.12.2020 22:22     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.12.2020 22:22     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-62 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-062

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| Total BTEX           |                   | <0.00198          | 0.00198      | mg/kg         | 11.14.2020 17:29     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 113               | %            | 70-130        | 11.14.2020 17:29     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 102               | %            | 70-130        | 11.14.2020 17:29     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-63 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-063 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 158    | 5.00 | mg/kg | 11.12.2020 19:28 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 22:41     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 22:41     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 22:41     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 22:41     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 85                | %            | 70-130        | 11.12.2020 22:41     |             |     |
| o-Terphenyl                        | 84-15-1           | 96                | %            | 70-130        | 11.12.2020 22:41     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-63 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-063

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142326

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 17:50     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 105               | %            | 70-130        | 11.14.2020 17:50     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 112               | %            | 70-130        | 11.14.2020 17:50     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-64 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-064 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 179    | 4.95 | mg/kg | 11.13.2020 08:40 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:00     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:00     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:00     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:00     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 87                | %            | 70-130        | 11.12.2020 23:00     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.12.2020 23:00     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-64 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-064

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 18:10     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 11.14.2020 18:10     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 111               | %            | 70-130        | 11.14.2020 18:10     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-65 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-065 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:16 % Moisture:  
 Seq Number: 3142160 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 183    | 5.04 | mg/kg | 11.13.2020 08:46 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:20     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:20     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:20     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:20     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.12.2020 23:20     |             |     |
| o-Terphenyl                        | 84-15-1           | 98                | %            | 70-130        | 11.12.2020 23:20     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Bottomhole-65 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-065

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:31     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 11.14.2020 18:31     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 11.14.2020 18:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-66 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-066 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 193    | 4.95 | mg/kg | 11.12.2020 17:08 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:39     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:39     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:39     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.12.2020 23:39     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 87                | %            | 70-130        | 11.12.2020 23:39     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.12.2020 23:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-66 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-066

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 18:52     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 11.14.2020 18:52     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 111               | %            | 70-130        | 11.14.2020 18:52     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-67 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-067 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2220   | 25.2 | mg/kg | 11.12.2020 17:23 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:59     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:59     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:59     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.12.2020 23:59     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.12.2020 23:59     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.12.2020 23:59     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-67 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-067

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.14.2020 19:13     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 100               | %            | 70-130        | 11.14.2020 19:13     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 113               | %            | 70-130        | 11.14.2020 19:13     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-68 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-068 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2010   | 25.0 | mg/kg | 11.12.2020 17:29 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:19     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:19     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:19     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:19     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.13.2020 00:19     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.13.2020 00:19     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-68 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-068

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:

Seq Number: 3142326

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.14.2020 19:33     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 97                | %            | 70-130        | 11.14.2020 19:33     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 110               | %            | 70-130        | 11.14.2020 19:33     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-69 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-069 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2210   | 24.8 | mg/kg | 11.12.2020 17:34 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:39     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:39     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:39     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:39     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.13.2020 00:39     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.13.2020 00:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-69 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-069

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142326

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.14.2020 19:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 97                | %            | 70-130        | 11.14.2020 19:54     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 109               | %            | 70-130        | 11.14.2020 19:54     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX

Caballo Riser

Sample Id: **Bottomhole-70 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-070

Date Collected: 11.10.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.12.2020 16:40

% Moisture:

Seq Number: 3142225

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 2250   | 25.0 | mg/kg | 11.12.2020 17:39 |      | 5   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.12.2020 13:00

% Moisture:

Seq Number: 3142210

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:58     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:58     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:58     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 00:58     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 85                | %            | 70-130        | 11.13.2020 00:58     |             |     |
| o-Terphenyl                        | 84-15-1           | 98                | %            | 70-130        | 11.13.2020 00:58     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-70 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-070

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.14.2020 07:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142326

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.14.2020 20:15     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 113               | %            | 70-130        | 11.14.2020 20:15     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 99                | %            | 70-130        | 11.14.2020 20:15     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-71 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-071 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1800   | 24.9 | mg/kg | 11.12.2020 17:55 |      | 5   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:37     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:37     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:37     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:37     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.13.2020 01:37     |             |     |
| o-Terphenyl                        | 84-15-1           | 106               | %            | 70-130        | 11.13.2020 01:37     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-71 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-071

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:08     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 117               | %            | 70-130        | 11.13.2020 13:08     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 82                | %            | 70-130        | 11.13.2020 13:08     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-72 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-072 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1110   | 5.04 | mg/kg | 11.12.2020 18:00 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:56     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:56     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:56     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.13.2020 01:56     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.13.2020 01:56     |             |     |
| o-Terphenyl                        | 84-15-1           | 105               | %            | 70-130        | 11.13.2020 01:56     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-72 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-072

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 13:33     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 89                | %            | 70-130        | 11.13.2020 13:33     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 91                | %            | 70-130        | 11.13.2020 13:33     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-73 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-073 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 958    | 4.96 | mg/kg | 11.12.2020 18:06 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.13.2020 02:15     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.13.2020 02:15     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.13.2020 02:15     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.13.2020 02:15     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.13.2020 02:15     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.13.2020 02:15     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-73 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-073

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 13:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 108               | %            | 70-130        | 11.13.2020 13:58     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 94                | %            | 70-130        | 11.13.2020 13:58     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-74 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-074 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1030   | 5.03 | mg/kg | 11.12.2020 18:11 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 02:34     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 02:34     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 02:34     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 02:34     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 91                | %            | 70-130        | 11.13.2020 02:34     |             |     |
| o-Terphenyl                        | 84-15-1           | 103               | %            | 70-130        | 11.13.2020 02:34     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-74 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-074

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:23     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.13.2020 14:23     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 113               | %            | 70-130        | 11.13.2020 14:23     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-75 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-075 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 966    | 5.05 | mg/kg | 11.12.2020 18:16 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.13.2020 02:53     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.13.2020 02:53     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.13.2020 02:53     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.13.2020 02:53     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.13.2020 02:53     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.13.2020 02:53     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-75 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-075

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142270

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| Total BTEX           |                   | <0.00200          | 0.00200      | mg/kg         | 11.13.2020 14:48     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.13.2020 14:48     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.13.2020 14:48     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-76 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-076 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1090   | 5.02 | mg/kg | 11.12.2020 18:21 | X    | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.13.2020 03:12     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.13.2020 03:12     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.13.2020 03:12     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.13.2020 03:12     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 94                | %            | 70-130        | 11.13.2020 03:12     |             |     |
| o-Terphenyl                        | 84-15-1           | 108               | %            | 70-130        | 11.13.2020 03:12     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-76 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-076

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:14     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 119               | %            | 70-130        | 11.13.2020 15:14     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 94                | %            | 70-130        | 11.13.2020 15:14     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-77 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-077 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 975    | 5.00 | mg/kg | 11.12.2020 18:37 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:31     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:31     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:31     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:31     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 87                | %            | 70-130        | 11.13.2020 03:31     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.13.2020 03:31     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-77 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-077

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 15:39     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 117               | %            | 70-130        | 11.13.2020 15:39     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 15:39     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-78 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-078 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1030   | 4.97 | mg/kg | 11.12.2020 18:42 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:50     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:50     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:50     | U           | 1   |
| Total TPH                          | PHC635            | <50.0             | 50.0         | mg/kg         | 11.13.2020 03:50     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.13.2020 03:50     |             |     |
| o-Terphenyl                        | 84-15-1           | 108               | %            | 70-130        | 11.13.2020 03:50     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-78 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-078

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| Total BTEX           |                   | <0.00202          | 0.00202      | mg/kg         | 11.13.2020 16:04     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.13.2020 16:04     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 96                | %            | 70-130        | 11.13.2020 16:04     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-79 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-079 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1040   | 5.02 | mg/kg | 11.12.2020 18:58 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.13.2020 04:08     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.13.2020 04:08     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.13.2020 04:08     | U           | 1   |
| Total TPH                          | PHC635            | <49.8             | 49.8         | mg/kg         | 11.13.2020 04:08     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.13.2020 04:08     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.13.2020 04:08     |             |     |





# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-79 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-079

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| Total BTEX           |                   | <0.00201          | 0.00201      | mg/kg         | 11.13.2020 16:29     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.13.2020 16:29     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 16:29     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-80 (4.5'-5')** Matrix: Soil Date Received: 11.11.2020 15:00  
 Lab Sample Id: 677578-080 Date Collected: 11.10.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.12.2020 16:40 % Moisture:  
 Seq Number: 3142225 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 1040   | 5.00 | mg/kg | 11.12.2020 19:04 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.12.2020 13:00 % Moisture:  
 Seq Number: 3142210 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.13.2020 04:27     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.13.2020 04:27     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.13.2020 04:27     | U           | 1   |
| Total TPH                          | PHC635            | <49.9             | 49.9         | mg/kg         | 11.13.2020 04:27     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.13.2020 04:27     |             |     |
| o-Terphenyl                        | 84-15-1           | 103               | %            | 70-130        | 11.13.2020 04:27     |             |     |



# Certificate of Analytical Results 677578

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottomhole-80 (4.5'-5')**

Matrix: Soil

Date Received: 11.11.2020 15:00

Lab Sample Id: 677578-080

Date Collected: 11.10.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.13.2020 10:00

% Moisture:

Seq Number: 3142270

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| Total BTEX           |                   | <0.00199          | 0.00199      | mg/kg         | 11.13.2020 16:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.13.2020 16:54     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.13.2020 16:54     |             |     |

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.      **ND** Not Detected.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK** Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS** Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



### Tetra Tech- Midland

#### Caballo Riser

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142023

Matrix: Solid

Prep Method: E300P

Date Prep: 11.11.2020

MB Sample Id: 7714976-1-BLK

LCS Sample Id: 7714976-1-BKS

LCSD Sample Id: 7714976-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 269        | 108      | 260         | 104       | 90-110 | 3    | 20        | mg/kg | 11.11.2020 20:53 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142156

Matrix: Solid

Prep Method: E300P

Date Prep: 11.12.2020

MB Sample Id: 7715049-1-BLK

LCS Sample Id: 7715049-1-BKS

LCSD Sample Id: 7715049-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 257        | 103      | 255         | 102       | 90-110 | 1    | 20        | mg/kg | 11.12.2020 08:50 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142158

Matrix: Solid

Prep Method: E300P

Date Prep: 11.12.2020

MB Sample Id: 7715051-1-BLK

LCS Sample Id: 7715051-1-BKS

LCSD Sample Id: 7715051-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 253        | 101      | 254         | 102       | 90-110 | 0    | 20        | mg/kg | 11.12.2020 12:29 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142160

Matrix: Solid

Prep Method: E300P

Date Prep: 11.12.2020

MB Sample Id: 7715059-1-BLK

LCS Sample Id: 7715059-1-BKS

LCSD Sample Id: 7715059-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 256        | 102      | 256         | 102       | 90-110 | 0    | 20        | mg/kg | 11.12.2020 16:28 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142225

Matrix: Solid

Prep Method: E300P

Date Prep: 11.12.2020

MB Sample Id: 7715061-1-BLK

LCS Sample Id: 7715061-1-BKS

LCSD Sample Id: 7715061-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 260        | 104      | 259         | 104       | 90-110 | 0    | 20        | mg/kg | 11.12.2020 16:57 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142023

Matrix: Soil

Prep Method: E300P

Date Prep: 11.11.2020

Parent Sample Id: 677462-012

MS Sample Id: 677462-012 S

MSD Sample Id: 677462-012 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3860          | 1250         | 5240      | 110     | 5220       | 109      | 90-110 | 0    | 20        | mg/kg | 11.11.2020 22:22 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland

Caballo Riser

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142023

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677581-001

MS Sample Id: 677581-001 S

Date Prep: 11.11.2020

MSD Sample Id: 677581-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 86.3          | 1260         | 1500      | 112     | 1500       | 112      | 90-110 | 0    | 20        | mg/kg | 11.11.2020 21:08 | X    |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142156

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677578-006

MS Sample Id: 677578-006 S

Date Prep: 11.12.2020

MSD Sample Id: 677578-006 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 4180          | 1260         | 5600      | 113     | 5610       | 113      | 90-110 | 0    | 20        | mg/kg | 11.12.2020 09:10 | X    |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142156

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677578-016

MS Sample Id: 677578-016 S

Date Prep: 11.12.2020

MSD Sample Id: 677578-016 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 2920          | 1240         | 4300      | 111     | 4280       | 110      | 90-110 | 0    | 20        | mg/kg | 11.12.2020 10:43 | X    |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142158

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677578-026

MS Sample Id: 677578-026 S

Date Prep: 11.12.2020

MSD Sample Id: 677578-026 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3350          | 1250         | 4730      | 110     | 4660       | 105      | 90-110 | 1    | 20        | mg/kg | 11.12.2020 12:49 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142158

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677578-036

MS Sample Id: 677578-036 S

Date Prep: 11.12.2020

MSD Sample Id: 677578-036 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3800          | 1250         | 5080      | 102     | 5060       | 101      | 90-110 | 0    | 20        | mg/kg | 11.12.2020 14:22 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3142160

Matrix: Soil

Prep Method: E300P

Parent Sample Id: 677578-046

MS Sample Id: 677578-046 S

Date Prep: 11.12.2020

MSD Sample Id: 677578-046 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 4860          | 2480         | 7590      | 110     | 7610       | 111      | 90-110 | 0    | 20        | mg/kg | 11.12.2020 16:48 | X    |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



## Tetra Tech- Midland

Caballo Riser

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3142160

Matrix: Soil

Prep Method: E300P

Date Prep: 11.12.2020

Parent Sample Id: 677578-056

MS Sample Id: 677578-056 S

MSD Sample Id: 677578-056 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 3240          | 1250         | 4580      | 107     | 4550       | 105      | 90-110 | 1    | 20        | mg/kg | 11.12.2020 18:21 |      |

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3142225

Matrix: Soil

Prep Method: E300P

Date Prep: 11.12.2020

Parent Sample Id: 677578-066

MS Sample Id: 677578-066 S

MSD Sample Id: 677578-066 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 193           | 248          | 439       | 99      | 443        | 101      | 90-110 | 1    | 20        | mg/kg | 11.12.2020 17:13 |      |

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3142225

Matrix: Soil

Prep Method: E300P

Date Prep: 11.12.2020

Parent Sample Id: 677578-076

MS Sample Id: 677578-076 S

MSD Sample Id: 677578-076 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 1090          | 251          | 1290      | 80      | 1300       | 84       | 90-110 | 1    | 20        | mg/kg | 11.12.2020 18:27 | X    |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3142201

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.12.2020

MB Sample Id: 7715105-1-BLK

LCS Sample Id: 7715105-1-BKS

LCSD Sample Id: 7715105-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 936        | 94       | 1020        | 102       | 70-130 | 9    | 20        | mg/kg | 11.12.2020 11:48 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 827        | 83       | 947         | 95        | 70-130 | 14   | 20        | mg/kg | 11.12.2020 11:48 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 91      |         | 100      |          | 112       |           | 70-130 | %     | 11.12.2020 11:48 |
| o-Terphenyl    | 81      |         | 88       |          | 103       |           | 70-130 | %     | 11.12.2020 11:48 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3142205

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.12.2020

MB Sample Id: 7715106-1-BLK

LCS Sample Id: 7715106-1-BKS

LCSD Sample Id: 7715106-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 1160       | 116      | 1080        | 108       | 70-130 | 7    | 20        | mg/kg | 11.12.2020 11:48 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 1150       | 115      | 1050        | 105       | 70-130 | 9    | 20        | mg/kg | 11.12.2020 11:48 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 109     |         | 128      |          | 105       |           | 70-130 | %     | 11.12.2020 11:48 |
| o-Terphenyl    | 119     |         | 122      |          | 101       |           | 70-130 | %     | 11.12.2020 11:48 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* |(C-E) / (C+E)|  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



## Tetra Tech- Midland

### Caballo Riser

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142208

MB Sample Id: 7715109-1-BLK

Matrix: Solid

LCS Sample Id: 7715109-1-BKS

Prep Method: SW8015P

Date Prep: 11.12.2020

LCSD Sample Id: 7715109-1-BSD

| Parameter                         | MB<br>Result | Spike<br>Amount | LCS<br>Result | LCS<br>%Rec | LCSD<br>Result | LCSD<br>%Rec | Limits       | %RPD | RPD<br>Limit | Units | Analysis<br>Date | Flag |
|-----------------------------------|--------------|-----------------|---------------|-------------|----------------|--------------|--------------|------|--------------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0        | 1000            | 1030          | 103         | 909            | 91           | 70-130       | 12   | 20           | mg/kg | 11.12.2020 12:04 |      |
| Diesel Range Organics (DRO)       | <50.0        | 1000            | 1030          | 103         | 929            | 93           | 70-130       | 10   | 20           | mg/kg | 11.12.2020 12:04 |      |
| Surrogate                         | MB<br>%Rec   | MB<br>Flag      | LCS<br>%Rec   | LCS<br>Flag |                | LCSD<br>%Rec | LCSD<br>Flag |      | Limits       | Units | Analysis<br>Date |      |
| 1-Chlorooctane                    | 84           |                 | 126           |             |                | 106          |              |      | 70-130       | %     | 11.12.2020 12:04 |      |
| o-Terphenyl                       | 101          |                 | 127           |             |                | 107          |              |      | 70-130       | %     | 11.12.2020 12:04 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142210

MB Sample Id: 7715110-1-BLK

Matrix: Solid

LCS Sample Id: 7715110-1-BKS

Prep Method: SW8015P

Date Prep: 11.12.2020

LCSD Sample Id: 7715110-1-BSD

| Parameter                         | MB<br>Result | Spike<br>Amount | LCS<br>Result | LCS<br>%Rec | LCSD<br>Result | LCSD<br>%Rec | Limits       | %RPD | RPD<br>Limit | Units | Analysis<br>Date | Flag |
|-----------------------------------|--------------|-----------------|---------------|-------------|----------------|--------------|--------------|------|--------------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0        | 1000            | 813           | 81          | 822            | 82           | 70-130       | 1    | 20           | mg/kg | 11.12.2020 20:45 |      |
| Diesel Range Organics (DRO)       | <50.0        | 1000            | 878           | 88          | 896            | 90           | 70-130       | 2    | 20           | mg/kg | 11.12.2020 20:45 |      |
| Surrogate                         | MB<br>%Rec   | MB<br>Flag      | LCS<br>%Rec   | LCS<br>Flag |                | LCSD<br>%Rec | LCSD<br>Flag |      | Limits       | Units | Analysis<br>Date |      |
| 1-Chlorooctane                    | 86           |                 | 114           |             |                | 113          |              |      | 70-130       | %     | 11.12.2020 20:45 |      |
| o-Terphenyl                       | 104          |                 | 112           |             |                | 116          |              |      | 70-130       | %     | 11.12.2020 20:45 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142201

Matrix: Solid

MB Sample Id: 7715105-1-BLK

Prep Method: SW8015P

Date Prep: 11.12.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.12.2020 11:25 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142205

Matrix: Solid

MB Sample Id: 7715106-1-BLK

Prep Method: SW8015P

Date Prep: 11.12.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.12.2020 11:25 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142208

Matrix: Solid

MB Sample Id: 7715109-1-BLK

Prep Method: SW8015P

Date Prep: 11.12.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.12.2020 11:45 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec





## Tetra Tech- Midland

### Caballo Riser

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142210

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.12.2020

MB Sample Id: 7715110-1-BLK

**Parameter**

Motor Oil Range Hydrocarbons (MRO)

**MB  
Result**

&lt;50.0

**Units**

mg/kg

**Analysis  
Date**

11.12.2020 20:26

**Flag****Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142201

Matrix: Soil

Prep Method: SW8015P

Date Prep: 11.12.2020

Parent Sample Id: 677578-001

MS Sample Id: 677578-001 S

MSD Sample Id: 677578-001 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)

**Parent  
Result**

&lt;49.9

**Spike  
Amount**

998

**MS  
Result**

1000

**MS  
%Rec**

100

**MSD  
Result**

1040

**MSD  
%Rec**

104

**Limits**

70-130

**%RPD**

4

**RPD  
Limit**

20

**Units**

mg/kg

**Analysis  
Date**

11.12.2020 12:53

**Flag**

Diesel Range Organics (DRO)

&lt;49.9

998

968

97

1010

101

70-130

4

20

mg/kg

11.12.2020 12:53

**Surrogate**

1-Chlorooctane

**MS  
%Rec**

118

**MS  
Flag****MSD  
%Rec**

121

**MSD  
Flag****Limits**

70-130

**Units**

%

**Analysis  
Date**

11.12.2020 12:53

o-Terphenyl

89

104

70-130

%

11.12.2020 12:53

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142205

Matrix: Soil

Prep Method: SW8015P

Date Prep: 11.12.2020

Parent Sample Id: 677578-021

MS Sample Id: 677578-021 S

MSD Sample Id: 677578-021 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)

**Parent  
Result**

&lt;49.8

**Spike  
Amount**

996

**MS  
Result**

1010

**MS  
%Rec**

101

**MSD  
Result**

1090

**MSD  
%Rec**

109

**Limits**

70-130

**%RPD**

8

**RPD  
Limit**

20

**Units**

mg/kg

**Analysis  
Date**

11.12.2020 12:53

**Flag**

Diesel Range Organics (DRO)

&lt;49.8

996

1040

104

1050

105

70-130

1

20

mg/kg

11.12.2020 12:53

**Surrogate**

1-Chlorooctane

**MS  
%Rec**

104

**MS  
Flag****MSD  
%Rec**

105

**MSD  
Flag****Limits**

70-130

**Units**

%

**Analysis  
Date**

11.12.2020 12:53

o-Terphenyl

100

101

70-130

%

11.12.2020 12:53

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142208

Matrix: Soil

Prep Method: SW8015P

Date Prep: 11.12.2020

Parent Sample Id: 677578-041

MS Sample Id: 677578-041 S

MSD Sample Id: 677578-041 SD

**Parameter**

Gasoline Range Hydrocarbons (GRO)

**Parent  
Result**

&lt;49.9

**Spike  
Amount**

997

**MS  
Result**

913

**MS  
%Rec**

92

**MSD  
Result**

846

**MSD  
%Rec**

85

**Limits**

70-130

**%RPD**

8

**RPD  
Limit**

20

**Units**

mg/kg

**Analysis  
Date**

11.12.2020 13:03

**Flag**

Diesel Range Organics (DRO)

&lt;49.9

997

849

85

851

85

70-130

0

20

mg/kg

11.12.2020 13:03

**Surrogate**

1-Chlorooctane

**MS  
%Rec**

96

**MS  
Flag****MSD  
%Rec**

97

**MSD  
Flag****Limits**

70-130

**Units**

%

**Analysis  
Date**

11.12.2020 13:03

o-Terphenyl

106

107

70-130

%

11.12.2020 13:03

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



## Tetra Tech- Midland

### Caballo Riser

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3142210

Parent Sample Id: 677578-061

Matrix: Soil

MS Sample Id: 677578-061 S

Prep Method: SW8015P

Date Prep: 11.12.2020

MSD Sample Id: 677578-061 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 997          | 945       | 95      | 928        | 93       | 70-130 | 2    | 20        | mg/kg | 11.12.2020 21:44 |      |
| Diesel Range Organics (DRO)       | <49.9         | 997          | 921       | 92      | 896        | 90       | 70-130 | 3    | 20        | mg/kg | 11.12.2020 21:44 |      |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 100     |         | 106      |          | 70-130 | %     | 11.12.2020 21:44 |
| o-Terphenyl    | 115     |         | 111      |          | 70-130 | %     | 11.12.2020 21:44 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142128

MB Sample Id: 7715095-1-BLK

Matrix: Solid

LCS Sample Id: 7715095-1-BKS

Prep Method: SW5035A

Date Prep: 11.12.2020

LCSD Sample Id: 7715095-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.113      | 113      | 0.110       | 110       | 70-130 | 3    | 35        | mg/kg | 11.12.2020 14:53 |      |
| Toluene      | <0.00200  | 0.100        | 0.120      | 120      | 0.113       | 113       | 70-130 | 6    | 35        | mg/kg | 11.12.2020 14:53 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.121      | 121      | 0.123       | 123       | 70-130 | 2    | 35        | mg/kg | 11.12.2020 14:53 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.244      | 122      | 0.250       | 125       | 70-130 | 2    | 35        | mg/kg | 11.12.2020 14:53 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.119      | 119      | 0.124       | 124       | 70-130 | 4    | 35        | mg/kg | 11.12.2020 14:53 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 76      |         | 90       |          | 88        |           | 70-130 | %     | 11.12.2020 14:53 |
| 4-Bromofluorobenzene | 82      |         | 103      |          | 119       |           | 70-130 | %     | 11.12.2020 14:53 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142237

MB Sample Id: 7715156-1-BLK

Matrix: Solid

LCS Sample Id: 7715156-1-BKS

Prep Method: SW5035A

Date Prep: 11.12.2020

LCSD Sample Id: 7715156-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0778     | 78       | 0.0797      | 80        | 70-130 | 2    | 35        | mg/kg | 11.11.2020 11:51 |      |
| Toluene      | <0.00200  | 0.100        | 0.0806     | 81       | 0.0834      | 83        | 70-130 | 3    | 35        | mg/kg | 11.11.2020 11:51 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0884     | 88       | 0.0914      | 91        | 70-130 | 3    | 35        | mg/kg | 11.11.2020 11:51 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.173      | 87       | 0.180       | 90        | 70-130 | 4    | 35        | mg/kg | 11.11.2020 11:51 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0862     | 86       | 0.0897      | 90        | 70-130 | 4    | 35        | mg/kg | 11.11.2020 11:51 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 97      |         | 101      |          | 99        |           | 70-130 | %     | 11.11.2020 11:51 |
| 4-Bromofluorobenzene | 112     |         | 102      |          | 100       |           | 70-130 | %     | 11.11.2020 11:51 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142270

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.13.2020

MB Sample Id: 7715190-1-BLK

LCS Sample Id: 7715190-1-BKS

LCSD Sample Id: 7715190-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0841     | 84       | 0.0908      | 91        | 70-130 | 8    | 35        | mg/kg | 11.13.2020 10:11 |      |
| Toluene      | <0.00200  | 0.100        | 0.0933     | 93       | 0.0974      | 97        | 70-130 | 4    | 35        | mg/kg | 11.13.2020 10:11 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0871     | 87       | 0.0901      | 90        | 70-130 | 3    | 35        | mg/kg | 11.13.2020 10:11 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.174      | 87       | 0.177       | 89        | 70-130 | 2    | 35        | mg/kg | 11.13.2020 10:11 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0879     | 88       | 0.0915      | 92        | 70-130 | 4    | 35        | mg/kg | 11.13.2020 10:11 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 79      |         | 91       |          | 99        |           | 70-130 | %     | 11.13.2020 10:11 |
| 4-Bromofluorobenzene | 79      |         | 102      |          | 98        |           | 70-130 | %     | 11.13.2020 10:11 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142271

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.13.2020

MB Sample Id: 7715191-1-BLK

LCS Sample Id: 7715191-1-BKS

LCSD Sample Id: 7715191-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.108      | 108      | 0.107       | 107       | 70-130 | 1    | 35        | mg/kg | 11.13.2020 12:10 |      |
| Toluene      | <0.00200  | 0.100        | 0.109      | 109      | 0.108       | 108       | 70-130 | 1    | 35        | mg/kg | 11.13.2020 12:10 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.105      | 105      | 0.103       | 103       | 70-130 | 2    | 35        | mg/kg | 11.13.2020 12:10 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.208      | 104      | 0.206       | 103       | 70-130 | 1    | 35        | mg/kg | 11.13.2020 12:10 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.100      | 100      | 0.0991      | 99        | 70-130 | 1    | 35        | mg/kg | 11.13.2020 12:10 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 89      |         | 101      |          | 98        |           | 70-130 | %     | 11.13.2020 12:10 |
| 4-Bromofluorobenzene | 103     |         | 99       |          | 98        |           | 70-130 | %     | 11.13.2020 12:10 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142326

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.14.2020

MB Sample Id: 7715224-1-BLK

LCS Sample Id: 7715224-1-BKS

LCSD Sample Id: 7715224-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.116      | 116      | 0.116       | 116       | 70-130 | 0    | 35        | mg/kg | 11.14.2020 08:09 |      |
| Toluene      | <0.00200  | 0.100        | 0.108      | 108      | 0.108       | 108       | 70-130 | 0    | 35        | mg/kg | 11.14.2020 08:09 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0995     | 100      | 0.0991      | 99        | 70-130 | 0    | 35        | mg/kg | 11.14.2020 08:09 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.193      | 97       | 0.192       | 96        | 70-130 | 1    | 35        | mg/kg | 11.14.2020 08:09 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0956     | 96       | 0.0955      | 96        | 70-130 | 0    | 35        | mg/kg | 11.14.2020 08:09 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 98      |         | 101      |          | 103       |           | 70-130 | %     | 11.14.2020 08:09 |
| 4-Bromofluorobenzene | 97      |         | 95       |          | 98        |           | 70-130 | %     | 11.14.2020 08:09 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142128

Parent Sample Id: 677578-001

Matrix: Soil

MS Sample Id: 677578-001 S

Prep Method: SW5035A

Date Prep: 11.12.2020

MSD Sample Id: 677578-001 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00198      | 0.0990       | 0.115     | 116     | 0.0650     | 65       | 70-130 | 56   | 35        | mg/kg | 11.12.2020 17:32 | XF   |
| Toluene      | <0.00198      | 0.0990       | 0.123     | 124     | 0.0573     | 58       | 70-130 | 73   | 35        | mg/kg | 11.12.2020 17:32 | XF   |
| Ethylbenzene | <0.00198      | 0.0990       | 0.113     | 114     | 0.0428     | 43       | 70-130 | 90   | 35        | mg/kg | 11.12.2020 17:32 | XF   |
| m,p-Xylenes  | <0.00396      | 0.198        | 0.228     | 115     | 0.0872     | 44       | 70-130 | 89   | 35        | mg/kg | 11.12.2020 17:32 | XF   |
| o-Xylene     | <0.00198      | 0.0990       | 0.116     | 117     | 0.0484     | 49       | 70-130 | 82   | 35        | mg/kg | 11.12.2020 17:32 | XF   |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 111     |         | 106      |          | 70-130 | %     | 11.12.2020 17:32 |
| 4-Bromofluorobenzene | 110     |         | 118      |          | 70-130 | %     | 11.12.2020 17:32 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142237

Parent Sample Id: 677578-041

Matrix: Soil

MS Sample Id: 677578-041 S

Prep Method: SW5035A

Date Prep: 11.12.2020

MSD Sample Id: 677578-041 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.100        | 0.0601    | 60      | 0.0457     | 46       | 70-130 | 27   | 35        | mg/kg | 11.13.2020 05:31 | X    |
| Toluene      | <0.00200      | 0.100        | 0.0637    | 64      | 0.0500     | 50       | 70-130 | 24   | 35        | mg/kg | 11.13.2020 05:31 | X    |
| Ethylbenzene | <0.00200      | 0.100        | 0.0684    | 68      | 0.0537     | 54       | 70-130 | 24   | 35        | mg/kg | 11.13.2020 05:31 | X    |
| m,p-Xylenes  | <0.00400      | 0.200        | 0.136     | 68      | 0.107      | 54       | 70-130 | 24   | 35        | mg/kg | 11.13.2020 05:31 | X    |
| o-Xylene     | <0.00200      | 0.100        | 0.0685    | 69      | 0.0539     | 54       | 70-130 | 24   | 35        | mg/kg | 11.13.2020 05:31 | X    |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 100     |         | 100      |          | 70-130 | %     | 11.13.2020 05:31 |
| 4-Bromofluorobenzene | 107     |         | 110      |          | 70-130 | %     | 11.13.2020 05:31 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142270

Parent Sample Id: 677578-071

Matrix: Soil

MS Sample Id: 677578-071 S

Prep Method: SW5035A

Date Prep: 11.13.2020

MSD Sample Id: 677578-071 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0831    | 83      | 0.0765     | 76       | 70-130 | 8    | 35        | mg/kg | 11.13.2020 11:01 |      |
| Toluene      | <0.00200      | 0.0998       | 0.0889    | 89      | 0.0782     | 77       | 70-130 | 13   | 35        | mg/kg | 11.13.2020 11:01 |      |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0804    | 81      | 0.0707     | 70       | 70-130 | 13   | 35        | mg/kg | 11.13.2020 11:01 |      |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.163     | 82      | 0.143      | 71       | 70-130 | 13   | 35        | mg/kg | 11.13.2020 11:01 |      |
| o-Xylene     | <0.00200      | 0.0998       | 0.0795    | 80      | 0.0702     | 70       | 70-130 | 12   | 35        | mg/kg | 11.13.2020 11:01 |      |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 96      |         | 99       |          | 70-130 | %     | 11.13.2020 11:01 |
| 4-Bromofluorobenzene | 97      |         | 101      |          | 70-130 | %     | 11.13.2020 11:01 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142271

Parent Sample Id: 677578-021

Matrix: Soil

MS Sample Id: 677578-021 S

Prep Method: SW5035A

Date Prep: 11.13.2020

MSD Sample Id: 677578-021 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0229    | 23      | 0.0494     | 50       | 70-130 | 73   | 35        | mg/kg | 11.13.2020 12:51 | XF   |
| Toluene      | <0.00200      | 0.0998       | 0.0135    | 14      | 0.0525     | 53       | 70-130 | 118  | 35        | mg/kg | 11.13.2020 12:51 | XF   |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0109    | 11      | 0.0561     | 56       | 70-130 | 135  | 35        | mg/kg | 11.13.2020 12:51 | XF   |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.0190    | 10      | 0.109      | 55       | 70-130 | 141  | 35        | mg/kg | 11.13.2020 12:51 | XF   |
| o-Xylene     | <0.00200      | 0.0998       | 0.0119    | 12      | 0.0575     | 58       | 70-130 | 131  | 35        | mg/kg | 11.13.2020 12:51 | XF   |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 106     |         | 92       |          | 70-130 | %     | 11.13.2020 12:51 |
| 4-Bromofluorobenzene | 103     |         | 99       |          | 70-130 | %     | 11.13.2020 12:51 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142326

Parent Sample Id: 677578-061

Matrix: Soil

MS Sample Id: 677578-061 S

Prep Method: SW5035A

Date Prep: 11.14.2020

MSD Sample Id: 677578-061 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00198      | 0.0990       | 0.0844    | 85      | 0.0747     | 75       | 70-130 | 12   | 35        | mg/kg | 11.14.2020 08:51 |      |
| Toluene      | <0.00198      | 0.0990       | 0.0726    | 73      | 0.0767     | 77       | 70-130 | 5    | 35        | mg/kg | 11.14.2020 08:51 |      |
| Ethylbenzene | <0.00198      | 0.0990       | 0.0784    | 79      | 0.0858     | 86       | 70-130 | 9    | 35        | mg/kg | 11.14.2020 08:51 |      |
| m,p-Xylenes  | <0.00396      | 0.198        | 0.148     | 75      | 0.163      | 82       | 70-130 | 10   | 35        | mg/kg | 11.14.2020 08:51 |      |
| o-Xylene     | <0.00198      | 0.0990       | 0.0745    | 75      | 0.0815     | 82       | 70-130 | 9    | 35        | mg/kg | 11.14.2020 08:51 |      |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 104     |         | 103      |          | 70-130 | %     | 11.14.2020 08:51 |
| 4-Bromofluorobenzene | 97      |         | 100      |          | 70-130 | %     | 11.14.2020 08:51 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

677578

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|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser              |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256           |  |
| Invoice to: Galan Kelley                 |  |                                    |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: Devin Dominguez |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) |   |
|-------------------------|-------------------------|------------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|---|
|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |   |
|                         |                         |            |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |   |
|                         | Bottomhole-1 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-2 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-3 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-4 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-5 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-6 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-7 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-8 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-9 (4.5'-5')  | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-10 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |

| LAB USE ONLY       |     | REMARKS:                                                             |  |
|--------------------|-----|----------------------------------------------------------------------|--|
| Sample Temperature | 5.2 | <input type="checkbox"/> STANDARD                                    |  |
|                    |     | <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr |  |
|                    |     | <input type="checkbox"/> Rush Charges Authorized                     |  |
|                    |     | <input type="checkbox"/> Special Report Limits or TRRP Report        |  |

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking #:



## Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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

677578

Page 2 of 8

|                                          |  |                                             |  |
|------------------------------------------|--|---------------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona                  |  |
| Project Name: Caballo Riser              |  |                                             |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256                    |  |
| Invoice to: Galan Kelley                 |  | Sampler Signature: Devin Dominguez          |  |
| Receiving Laboratory: Xenco              |  |                                             |  |
| Comments:                                |  |                                             |  |
| LAB #<br>(LAB USE ONLY)                  |  | SAMPLE IDENTIFICATION                       |  |
|                                          |  | YEAR: 2020                                  |  |
|                                          |  | DATE                                        |  |
|                                          |  | TIME                                        |  |
|                                          |  | WATER                                       |  |
|                                          |  | SOIL                                        |  |
|                                          |  | HCL                                         |  |
|                                          |  | HNO <sub>3</sub>                            |  |
|                                          |  | ICE                                         |  |
|                                          |  | None                                        |  |
|                                          |  | # CONTAINERS                                |  |
|                                          |  | FILTERED (Y/N)                              |  |
|                                          |  | BTEX 8021B BTEX 8260B                       |  |
|                                          |  | TPH TX1005 (Ext to C35)                     |  |
|                                          |  | TPH 8015M ( GRO - DRO - ORO - MRO)          |  |
|                                          |  | PAH 8270C                                   |  |
|                                          |  | Total Metals Ag As Ba Cd Cr Pb Se Hg        |  |
|                                          |  | TCLP Metals Ag As Ba Cd Cr Pb Se Hg         |  |
|                                          |  | TCLP Volatiles                              |  |
|                                          |  | TCLP Semi Volatiles                         |  |
|                                          |  | RCI                                         |  |
|                                          |  | GC/MS Vol. 8260B / 624                      |  |
|                                          |  | GC/MS Semi. Vol. 8270C/625                  |  |
|                                          |  | PCB's 8082 / 608                            |  |
|                                          |  | NORM                                        |  |
|                                          |  | PLM (Asbestos)                              |  |
|                                          |  | Chloride                                    |  |
|                                          |  | Chloride Sulfate TDS                        |  |
|                                          |  | General Water Chemistry (see attached list) |  |
|                                          |  | Anion/Cation Balance                        |  |
|                                          |  | TPH 8015R                                   |  |
|                                          |  | Hold                                        |  |
| LAB USE ONLY                             |  | REMARKS:                                    |  |
|                                          |  | STANDARD                                    |  |
|                                          |  | RUSH: Same Day 24 hr 48 hr 72 hr            |  |
|                                          |  | Rush Charges Authorized                     |  |
|                                          |  | Special Report Limits or TRRP Report        |  |

## Analysis Request of Custody Record



Tetra Tech, Inc.

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

Client Name: EOG

Site Manager: Mike Carmona

Project Name: Caballo Riser

Project Location: Lea County, New Mexico

Project #:

212C-MD-02256

Invoice to:

Galan Kelley

Receiving Laboratory: Xenco

Sampler Signature: Devin Dominguez

Comments:

Devin Dominguez

## SAMPLE IDENTIFICATION

PM

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      | # CONTAINERS | FILTERED (Y/N) |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |              |                |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         |                         |            |      |        |      |                     |                  |     |      |              |                |   |   |   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|                         | Bottomhole-21 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |              | 1              | N | X | X |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Surrendered by: Date: 11/11 Time:

Surrendered by: Date: 11/11 Time:

Surrendered by: Date: Time:

Received by: Date: 11/11/20 Time: 15:00

Received by: Date: Time:

Received by: Date: Time:

## ANALYSIS REQUEST

(Circle or Specify Method No.)

 BTEX 8021B BTEX 8260B  
 TPH TX1005 (Ext to C35)  
 TPH 8015M ( GRO - DRO - ORO - MRO)  
 PAH 8270C  
 Total Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Volatiles  
 TCLP Semi Volatiles  
 RCI  
 GC/MS Vol. 8260B / 624  
 GC/MS Semi. Vol. 8270C/625  
 PCB's 8082 / 608  
 NORM  
 PLM (Asbestos)  
 Chloride  
 Chloride Sulfate TDS  
 General Water Chemistry (see attached list)  
 Anion/Cation Balance  
 TPH 8015R

Hold

LAB USE ONLY

REMARKS:

STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

Sample Temperature

5.2

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

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**Tetra Tech, Inc.**

900 West Wall Street, Ste 100  
Midland, Texas 79701  
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## Analysis Request of Custody Record

**Tetra Tech, Inc.**900 West Wall Street, Ste 100  
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677578

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|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser              |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256           |  |
| Invoice to: Galan Kelley                 |  |                                    |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: Devin Dominguez |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) |   |
|-------------------------|-------------------------|------------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|---|
|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |   |
|                         |                         |            |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |   |
|                         | Bottomhole-41 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-42 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-43 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-44 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-45 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-46 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-47 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-48 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-49 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-50 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |

| LAB USE ONLY                                                         | REMARKS: |
|----------------------------------------------------------------------|----------|
| <input type="checkbox"/> STANDARD                                    |          |
| <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr |          |
| <input type="checkbox"/> Rush Charges Authorized                     |          |
| <input type="checkbox"/> Special Report Limits or TRRP Report        |          |

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

ANALYSIS REQUEST  
(Circle or Specify Method No.)

Hold

## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 900 West Wall Street, Ste 100  
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 Tel (432) 682-4559  
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6077578

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|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser              |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256           |  |
| Invoice to: Galan Kelley                 |  |                                    |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: Devin Dominguez |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      | # CONTAINERS | FILTERED (Y/N) |
|-------------------------|-------------------------|------------|------|--------|------|---------------------|------------------|-----|------|--------------|----------------|
|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |              |                |
|                         |                         |            |      |        |      |                     |                  |     |      |              |                |
|                         | Bottomhole-51 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-52 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-53 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-54 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-55 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-56 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-57 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-58 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-59 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-60 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |

| LAB USE ONLY | REMARKS:                                                                                                                                                                                                                                                    | ANALYSIS REQUEST<br>(Circle or Specify Method No.) |            |                         |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|--------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------|-------------------------|-----------------------------------|-----------|--------------------------------------|-------------------------------------|----------------|---------------------|-----|------------------------|----------------------------|------------------|------|----------------|----------|----------------------|---------------------------------------------|----------------------|-----------|------|
|              |                                                                                                                                                                                                                                                             |                                                    |            |                         |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
| LAB USE ONLY | Sample Temperature<br>5.2<br><input type="checkbox"/> STANDARD<br><input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr<br><input type="checkbox"/> Rush Charges Authorized<br><input type="checkbox"/> Special Report Limits or TRRP Report | BTEX 8021B                                         | BTEX 8260B | TPH TX1005 (Ext to C35) | TPH 8015M (GRO - DRO - ORO - MRO) | PAH 8270C | Total Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C/625 | PCB's 8082 / 608 | NORM | PLM (Asbestos) | Chloride | Chloride Sulfate TDS | General Water Chemistry (see attached list) | Anion/Cation Balance | TPH 8015R | Hold |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |
|              |                                                                                                                                                                                                                                                             | X                                                  | X          | X                       | X                                 | X         |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

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

677578

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|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser              |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256           |  |
| Invoice to: Galan Kelley                 |  | Sampler Signature: Devin Dominguez |  |
| Receiving Laboratory: Xenco              |  |                                    |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      | # CONTAINERS | FILTERED (Y/N) |
|-------------------------|-------------------------|------------|------|--------|------|---------------------|------------------|-----|------|--------------|----------------|
|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |              |                |
|                         |                         |            |      |        |      |                     |                  |     |      |              |                |
|                         | Bottomhole-61 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-62 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-63 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-64 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-65 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-66 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-67 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-68 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-69 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |
|                         | Bottomhole-70 (4.5'-5') | 11/10/2020 |      | X      |      | X                   |                  |     |      | 1            | N              |

|                  |             |             |              |                |             |
|------------------|-------------|-------------|--------------|----------------|-------------|
| Relinquished by: | Date: 11/11 | Time: 11:11 | Received by: | Date: 11/11/20 | Time: 15:00 |
| Relinquished by: | Date:       | Time:       | Received by: | Date:          | Time:       |
| Relinquished by: | Date:       | Time:       | Received by: | Date:          | Time:       |

|              |          |                                                                                                                                                                                                                                       |
|--------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LAB USE ONLY | REMARKS: | <input type="checkbox"/> STANDARD<br><input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr <b>72 hr</b><br><input type="checkbox"/> Rush Charges Authorized<br><input type="checkbox"/> Special Report Limits or TRRP Report |
|              |          |                                                                                                                                                                                                                                       |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| BTEX 8021B BTEX 8026B<br>TPH TX1005 (Ext to C35)<br>TPH 8015M ( GRO - DRO - ORO - MRO)<br>PAH 8270C<br>Total Metals Ag As Ba Cd Cr Pb Se Hg<br>TCLP Metals Ag As Ba Cd Cr Pb Se Hg<br>TCLP Volatiles<br>TCLP Semi Volatiles<br>RCI<br>GC/MS Vol. 8260B / 624<br>GC/MS Semi. Vol. 8270C/625<br>PCB's 8082 / 608<br>NORM<br>PLM (Asbestos)<br>Chloride<br>Chloride Sulfate TDS<br>General Water Chemistry (see attached list)<br>Anion/Cation Balance<br>TPH 8015R<br>Hold | ANALYSIS REQUEST<br>(Circle or Specify Method No.) |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|

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## Analysis Request of Chain of Custody Record



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|                                          |  |                                    |  |
|------------------------------------------|--|------------------------------------|--|
| Client Name: EOG                         |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser              |  |                                    |  |
| Project Location: Lea County, New Mexico |  | Project #: 212C-MD-02256           |  |
| Invoice to: Galan Kelley                 |  |                                    |  |
| Receiving Laboratory: Xenco              |  | Sampler Signature: Devin Dominguez |  |
| Comments:                                |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION   | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |            | # CONTAINERS | FILTERED (Y/N) |   |
|-------------------------|-------------------------|------------|------|--------|------|---------------------|------------------|-----|------|------------|--------------|----------------|---|
|                         |                         | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |            |              |                |   |
|                         |                         |            |      |        |      |                     |                  |     |      | YEAR: 2020 |              |                |   |
|                         | Bottomhole-71 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-72 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-73 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-74 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-75 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-76 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-77 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-78 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-79 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |
|                         | Bottomhole-80 (4.5'-5') | 11/10/2020 |      | X      |      |                     |                  | X   |      |            |              | 1              | N |

| LAB USE ONLY | REMARKS: | ANALYSIS REQUEST<br>(Circle or Specify Method No.) |            |                         |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|--------------|----------|----------------------------------------------------|------------|-------------------------|-----------------------------------|-----------|--------------------------------------|-------------------------------------|----------------|---------------------|-----|------------------------|----------------------------|------------------|------|----------------|----------|----------------------|---------------------------------------------|----------------------|-----------|------|--|
|              |          | BTEX 8021B                                         | BTEX 8260B | TPH TX1005 (Ext to C35) | TPH 8015M (GRO - DRO - ORO - MRO) | PAH 8270C | Total Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Metals Ag As Ba Cd Cr Pb Se Hg | TCLP Volatiles | TCLP Semi Volatiles | RCI | GC/MS Vol. 8260B / 624 | GC/MS Semi. Vol. 8270C/625 | PCB's 8082 / 608 | NORM | PLM (Asbestos) | Chloride | Chloride Sulfate TDS | General Water Chemistry (see attached list) | Anion/Cation Balance | TPH 8015R | Hold |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |
|              |          | X                                                  |            | X                       |                                   |           |                                      |                                     |                |                     |     |                        |                            |                  |      |                |          |                      |                                             |                      |           |      |  |

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 11.11.2020 03.00.00 PM

Work Order #: 677578

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used :

| Sample Receipt Checklist                                | Comments |
|---------------------------------------------------------|----------|
| #1 *Temperature of cooler(s)?                           | 5.2      |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | Yes      |
| #5 Custody Seals intact on sample bottles?              | Yes      |
| #6 *Custody Seals Signed and dated?                     | Yes      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | Yes      |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | Yes      |
| #18 Water VOC samples have zero headspace?              | Yes      |

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 11.11.2020

Checklist reviewed by:



Jessica Kramer

Date: 11.11.2020

## Certificate of Analysis Summary 678618

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.25.2020 15:22

Project Manager: Jessica Kramer

| Analysis Requested                 | Lab Id:                           | 678618-001              | 678618-002              | 678618-003              | 678618-004              | 678618-005              | 678618-006              |
|------------------------------------|-----------------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                                    | Field Id:                         | Bottom Hole-81 (4.5'BEB | Bottom Hole-82 (4.5'BEB | Bottom Hole-83 (4.5'BEB | Bottom Hole-84 (4.5'BEB | Bottom Hole-85 (4.5'BEB | Bottom Hole-86 (4.5'BEB |
|                                    | Depth:                            |                         |                         |                         |                         |                         |                         |
|                                    | Matrix:                           | SOIL                    | SOIL                    | SOIL                    | SOIL                    | SOIL                    | SOIL                    |
|                                    | Sampled:                          | 11.16.2020 00:00        | 11.16.2020 00:00        | 11.16.2020 00:00        | 11.16.2020 00:00        | 11.16.2020 00:00        | 11.16.2020 00:00        |
| BTEX by EPA 8021B                  | Extracted:                        | 11.23.2020 12:00        | 11.23.2020 12:00        | 11.23.2020 12:00        | 11.23.2020 12:00        | 11.23.2020 12:00        | 11.23.2020 12:00        |
|                                    | Analyzed:                         | 11.23.2020 22:54        | 11.23.2020 23:20        | 11.23.2020 23:46        | 11.24.2020 00:11        | 11.24.2020 00:37        | 11.24.2020 01:03        |
|                                    | Units/RL:                         | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
|                                    | Benzene                           | <0.00202 0.00202        | <0.00200 0.00200        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00200 0.00200        |
|                                    | Toluene                           | <0.00202 0.00202        | <0.00200 0.00200        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00200 0.00200        |
| Ethylbenzene                       |                                   | <0.00202 0.00202        | <0.00200 0.00200        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00200 0.00200        |
| m,p-Xylenes                        |                                   | <0.00403 0.00403        | <0.00401 0.00401        | <0.00404 0.00404        | <0.00404 0.00404        | <0.00403 0.00403        | <0.00399 0.00399        |
| o-Xylene                           |                                   | <0.00202 0.00202        | <0.00200 0.00200        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00202 0.00202        | <0.00200 0.00200        |
| Total Xylenes                      |                                   | <0.002020 0.002020      | <0.002000 0.002000      | <0.002020 0.002020      | <0.002020 0.002020      | <0.002020 0.002020      | <0.002000 0.002000      |
| Total BTEX                         |                                   | <0.002020 0.002020      | <0.002000 0.002000      | <0.002020 0.002020      | <0.002020 0.002020      | <0.002020 0.002020      | <0.002000 0.002000      |
| Inorganic Anions by EPA 300/300.1  | Extracted:                        | 11.21.2020 13:25        | 11.21.2020 13:25        | 11.21.2020 13:25        | 11.21.2020 13:25        | 11.21.2020 13:25        | 11.21.2020 13:25        |
|                                    | Analyzed:                         | 11.21.2020 19:34        | 11.21.2020 19:50        | 11.21.2020 19:55        | 11.21.2020 20:11        | 11.21.2020 20:17        | 11.21.2020 20:22        |
|                                    | Units/RL:                         | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
|                                    | Chloride                          | 7.36 5.00               | 7.96 5.02               | 7.74 4.96               | 8.62 4.99               | 7.56 5.02               | 7.16 5.04               |
|                                    |                                   |                         |                         |                         |                         |                         |                         |
| TPH By SW8015 Mod                  | Extracted:                        | 11.24.2020 10:00        | 11.24.2020 10:00        | 11.24.2020 10:00        | 11.24.2020 10:00        | 11.24.2020 10:00        | 11.23.2020 10:00        |
|                                    | Analyzed:                         | 11.24.2020 19:42        | 11.24.2020 20:03        | 11.24.2020 20:25        | 11.24.2020 20:47        | 11.24.2020 21:09        | 11.23.2020 16:40        |
|                                    | Units/RL:                         | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                | mg/kg RL                |
|                                    | Gasoline Range Hydrocarbons (GRO) | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              | <50.0 50.0              | <49.8 49.8              | <49.9 49.9              |
|                                    | Diesel Range Organics (DRO)       | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              | <50.0 50.0              | <49.8 49.8              | <49.9 49.9              |
| Motor Oil Range Hydrocarbons (MRO) |                                   | <50.0 50.0              | <49.9 49.9              | <50.0 50.0              | <50.0 50.0              | <49.8 49.8              | <49.9 49.9              |
| Total TPH                          |                                   | <50.00 50.00            | <49.90 49.90            | <50.00 50.00            | <50.00 50.00            | <49.80 49.80            | <49.90 49.90            |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 678618

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Fri 11.20.2020 14:19

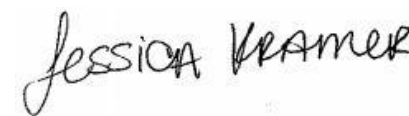
Report Date: 11.25.2020 15:22

Project Manager: Jessica Kramer

| Analysis Requested                 | Lab Id:    | 678618-007               | 678618-008               | 678618-009               | 678618-010               | 678618-011               | 678618-012               |
|------------------------------------|------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
|                                    | Field Id:  | Bottom Hole-87 (4.5'BEB) | Bottom Hole-88 (4.5'BEB) | Bottom Hole-89 (4.5'BEB) | Bottom Hole-90 (4.5'BEB) | Bottom Hole-91 (4.5'BEB) | Bottom Hole-92 (4.5'BEB) |
|                                    | Depth:     |                          |                          |                          |                          |                          |                          |
|                                    | Matrix:    | SOIL                     | SOIL                     | SOIL                     | SOIL                     | SOIL                     | SOIL                     |
|                                    | Sampled:   | 11.16.2020 00:00         | 11.16.2020 00:00         | 11.16.2020 00:00         | 11.16.2020 00:00         | 11.16.2020 00:00         | 11.16.2020 00:00         |
| BTEX by EPA 8021B                  | Extracted: | 11.23.2020 12:00         | 11.23.2020 12:00         | 11.23.2020 12:00         | 11.23.2020 12:00         | 11.21.2020 17:00         | 11.21.2020 17:00         |
|                                    | Analyzed:  | 11.24.2020 01:29         | 11.24.2020 01:55         | 11.24.2020 02:21         | 11.24.2020 02:47         | 11.22.2020 20:09         | 11.22.2020 20:30         |
|                                    | Units/RL:  | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 |
| Benzene                            |            | <0.00200 0.00200         | <0.00201 0.00201         | <0.00199 0.00199         | <0.00200 0.00200         | <0.00202 0.00202         | <0.00201 0.00201         |
| Toluene                            |            | <0.00200 0.00200         | <0.00201 0.00201         | <0.00199 0.00199         | <0.00200 0.00200         | <0.00202 0.00202         | <0.00201 0.00201         |
| Ethylbenzene                       |            | <0.00200 0.00200         | <0.00201 0.00201         | <0.00199 0.00199         | <0.00200 0.00200         | <0.00202 0.00202         | <0.00201 0.00201         |
| m,p-Xylenes                        |            | <0.00401 0.00401         | <0.00402 0.00402         | <0.00398 0.00398         | <0.00399 0.00399         | <0.00403 0.00403         | <0.00402 0.00402         |
| o-Xylene                           |            | <0.00200 0.00200         | <0.00201 0.00201         | <0.00199 0.00199         | <0.00200 0.00200         | <0.00202 0.00202         | <0.00201 0.00201         |
| Total Xylenes                      |            | <0.002000 0.002000       | <0.002010 0.002010       | <0.001990 0.001990       | <0.002000 0.002000       | <0.002020 0.002020       | <0.002010 0.002010       |
| Total BTEX                         |            | <0.002000 0.002000       | <0.002010 0.002010       | <0.001990 0.001990       | <0.002000 0.002000       | <0.002020 0.002020       | <0.002010 0.002010       |
| Inorganic Anions by EPA 300/300.1  | Extracted: | 11.21.2020 13:25         | 11.21.2020 13:25         | 11.21.2020 13:25         | 11.21.2020 13:25         | 11.21.2020 13:45         | 11.21.2020 13:45         |
|                                    | Analyzed:  | 11.21.2020 20:27         | 11.21.2020 20:33         | 11.21.2020 20:38         | 11.21.2020 20:43         | 11.21.2020 21:15         | 11.21.2020 21:31         |
|                                    | Units/RL:  | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 |
| Chloride                           |            | 7.45 4.98                | 8.05 5.00                | 7.33 5.04                | 6.92 4.96                | 7.58 5.00                | 8.16 4.95                |
| TPH By SW8015 Mod                  | Extracted: | 11.23.2020 10:00         | 11.23.2020 10:00         | 11.23.2020 10:00         | 11.23.2020 10:00         | 11.23.2020 10:00         | 11.23.2020 10:00         |
|                                    | Analyzed:  | 11.23.2020 17:19         | 11.23.2020 17:38         | 11.23.2020 17:58         | 11.23.2020 18:17         | 11.23.2020 18:37         | 11.23.2020 18:56         |
|                                    | Units/RL:  | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 | mg/kg RL                 |
| Gasoline Range Hydrocarbons (GRO)  |            | <49.9 49.9               | <49.8 49.8               | <50.0 50.0               | <49.9 49.9               | <50.0 50.0               | <49.9 49.9               |
| Diesel Range Organics (DRO)        |            | <49.9 49.9               | <49.8 49.8               | <50.0 50.0               | <49.9 49.9               | <50.0 50.0               | <49.9 49.9               |
| Motor Oil Range Hydrocarbons (MRO) |            | <49.9 49.9               | <49.8 49.8               | <50.0 50.0               | <49.9 49.9               | <50.0 50.0               | <49.9 49.9               |
| Total TPH                          |            | <49.90 49.90             | <49.80 49.80             | <50.00 50.00             | <49.90 49.90             | <50.00 50.00             | <49.90 49.90             |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico





## Certificate of Analysis Summary 678618

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co, NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.25.2020 15:22

Project Manager: Jessica Kramer

|                                          |                                                                                                                                                    |                                                                                                                                                    |  |  |  |  |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| <b>Analysis Requested</b>                | <b>Lab Id:</b> 678618-013<br><b>Field Id:</b> Bottom Hole-93 (4.5'BEB)<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 11.16.2020 00:00 | <b>Lab Id:</b> 678618-014<br><b>Field Id:</b> Bottom Hole-94 (4.5'BEB)<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 11.16.2020 00:00 |  |  |  |  |
| <b>BTEX by EPA 8021B</b>                 | <b>Extracted:</b> 11.21.2020 17:00<br><b>Analyzed:</b> 11.22.2020 20:50<br><b>Units/RL:</b> mg/kg RL                                               | <b>Extracted:</b> 11.21.2020 17:00<br><b>Analyzed:</b> 11.22.2020 21:11<br><b>Units/RL:</b> mg/kg RL                                               |  |  |  |  |
| Benzene                                  | <0.00200 0.00200                                                                                                                                   | <0.00200 0.00200                                                                                                                                   |  |  |  |  |
| Toluene                                  | <0.00200 0.00200                                                                                                                                   | <0.00200 0.00200                                                                                                                                   |  |  |  |  |
| Ethylbenzene                             | <0.00200 0.00200                                                                                                                                   | <0.00200 0.00200                                                                                                                                   |  |  |  |  |
| m,p-Xylenes                              | <0.00401 0.00401                                                                                                                                   | <0.00399 0.00399                                                                                                                                   |  |  |  |  |
| o-Xylene                                 | <0.00200 0.00200                                                                                                                                   | <0.00200 0.00200                                                                                                                                   |  |  |  |  |
| Total Xylenes                            | <0.002000 0.002000                                                                                                                                 | <0.002000 0.002000                                                                                                                                 |  |  |  |  |
| Total BTEX                               | <0.002000 0.002000                                                                                                                                 | <0.002000 0.002000                                                                                                                                 |  |  |  |  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <b>Extracted:</b> 11.21.2020 13:45<br><b>Analyzed:</b> 11.21.2020 21:36<br><b>Units/RL:</b> mg/kg RL                                               | <b>Extracted:</b> 11.21.2020 13:45<br><b>Analyzed:</b> 11.21.2020 21:42<br><b>Units/RL:</b> mg/kg RL                                               |  |  |  |  |
| Chloride                                 | 8.19 5.02                                                                                                                                          | 8.28 4.99                                                                                                                                          |  |  |  |  |
| <b>TPH By SW8015 Mod</b>                 | <b>Extracted:</b> 11.23.2020 10:00<br><b>Analyzed:</b> 11.23.2020 19:15<br><b>Units/RL:</b> mg/kg RL                                               | <b>Extracted:</b> 11.23.2020 10:00<br><b>Analyzed:</b> 11.23.2020 19:35<br><b>Units/RL:</b> mg/kg RL                                               |  |  |  |  |
| Gasoline Range Hydrocarbons (GRO)        | <50.0 50.0                                                                                                                                         | <49.9 49.9                                                                                                                                         |  |  |  |  |
| Diesel Range Organics (DRO)              | <50.0 50.0                                                                                                                                         | <49.9 49.9                                                                                                                                         |  |  |  |  |
| Motor Oil Range Hydrocarbons (MRO)       | <50.0 50.0                                                                                                                                         | <49.9 49.9                                                                                                                                         |  |  |  |  |
| Total TPH                                | <50.00 50.00                                                                                                                                       | <49.90 49.90                                                                                                                                       |  |  |  |  |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



# Analytical Report 678618

for

**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Caballo Riser**

**212C-MD-02256**

**11.25.2020**

Collected By: Client



**1211 W. Florida Ave  
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.25.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **678618**

**Caballo Riser**

Project Address: Lea Co, NM

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 678618. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 678618 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

**Sample Cross Reference 678618****Tetra Tech- Midland, Midland, TX**

Caballo Riser

| Sample Id                | Matrix | Date Collected   | Sample Depth | Lab Sample Id |
|--------------------------|--------|------------------|--------------|---------------|
| Bottom Hole-81 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-001    |
| Bottom Hole-82 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-002    |
| Bottom Hole-83 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-003    |
| Bottom Hole-84 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-004    |
| Bottom Hole-85 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-005    |
| Bottom Hole-86 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-006    |
| Bottom Hole-87 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-007    |
| Bottom Hole-88 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-008    |
| Bottom Hole-89 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-009    |
| Bottom Hole-90 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-010    |
| Bottom Hole-91 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-011    |
| Bottom Hole-92 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-012    |
| Bottom Hole-93 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-013    |
| Bottom Hole-94 (4.5'BEB) | S      | 11.16.2020 00:00 |              | 678618-014    |

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Caballo Riser**

Project ID: 212C-MD-02256  
Work Order Number(s): 678618

Report Date: 11.25.2020  
Date Received: 11.20.2020

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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3142980 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.  
Samples affected are: 678618-013 S.

Lab Sample ID 678618-013 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 678618-011, -012, -013, -014.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Benzene Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 678618-011, -012, -013, -014

Batch: LBA-3143127 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.  
Samples affected are: 678617-006 SD, 678618-008.

Batch: LBA-3143174 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 678618-006, 678618-008, 678618-009, 678618-014, 678618-012, 678618-013, 678618-011.



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-81 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-001

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.36   | 5.00 | mg/kg | 11.21.2020 19:34 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.24.2020 10:00

% Moisture:

Seq Number: 3143311

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 19:42     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 19:42     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 19:42     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 19:42     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 108               | %            | 70-130        | 11.24.2020 19:42     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.24.2020 19:42     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-81 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-001

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 22:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 135               | %            | 70-130        | 11.23.2020 22:54     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 93                | %            | 70-130        | 11.23.2020 22:54     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-82 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-002

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.96   | 5.02 | mg/kg | 11.21.2020 19:50 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.24.2020 10:00

% Moisture:

Seq Number: 3143311

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 20:03     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 20:03     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 20:03     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 20:03     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 112               | %            | 70-130        | 11.24.2020 20:03     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.24.2020 20:03     |             |     |





# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-82 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-002

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 23:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 127               | %            | 70-130        | 11.23.2020 23:20     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.23.2020 23:20     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-83 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-003

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.74   | 4.96 | mg/kg | 11.21.2020 19:55 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.24.2020 10:00

% Moisture:

Seq Number: 3143311

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:25     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:25     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:25     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 20:25     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 111               | %            | 70-130        | 11.24.2020 20:25     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.24.2020 20:25     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-83 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-003

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 127               | %            | 70-130        | 11.23.2020 23:46     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 104               | %            | 70-130        | 11.23.2020 23:46     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-84 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-004

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.62   | 4.99 | mg/kg | 11.21.2020 20:11 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.24.2020 10:00

% Moisture:

Seq Number: 3143311

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:47     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:47     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 20:47     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 20:47     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 102               | %            | 70-130        | 11.24.2020 20:47     |             |     |
| o-Terphenyl                        | 84-15-1           | 92                | %            | 70-130        | 11.24.2020 20:47     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-84 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-004

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00404          | 0.00404      | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 129               | %            | 70-130        | 11.24.2020 00:11     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.24.2020 00:11     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-85 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-005

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.56   | 5.02 | mg/kg | 11.21.2020 20:17 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.24.2020 10:00

% Moisture:

Seq Number: 3143311

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 21:09     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 21:09     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 21:09     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 21:09     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 107               | %            | 70-130        | 11.24.2020 21:09     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.24.2020 21:09     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-85 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-005

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:37     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 138               | %            | 70-130        | 11.24.2020 00:37     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.24.2020 00:37     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-86 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-006

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.16   | 5.04 | mg/kg | 11.21.2020 20:22 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 16:40     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 16:40     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 16:40     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 16:40     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 92                | %            | 70-130        | 11.23.2020 16:40     |             |     |
| o-Terphenyl                        | 84-15-1           | 142               | %            | 70-130        | 11.23.2020 16:40     | **          |     |





# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-86 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-006

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 01:03     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 141               | %            | 70-130        | 11.24.2020 01:03     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 105               | %            | 70-130        | 11.24.2020 01:03     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-87 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-007

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.45   | 4.98 | mg/kg | 11.21.2020 20:27 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 17:19     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 17:19     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 17:19     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 17:19     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.23.2020 17:19     |             |     |
| o-Terphenyl                        | 84-15-1           | 130               | %            | 70-130        | 11.23.2020 17:19     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-87 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-007

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 01:29     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 145               | %            | 70-130        | 11.24.2020 01:29     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 111               | %            | 70-130        | 11.24.2020 01:29     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-88 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-008

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.05   | 5.00 | mg/kg | 11.21.2020 20:33 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.23.2020 17:38     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.23.2020 17:38     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.23.2020 17:38     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.23.2020 17:38     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 107               | %            | 70-130        | 11.23.2020 17:38     |             |     |
| o-Terphenyl                        | 84-15-1           | 161               | %            | 70-130        | 11.23.2020 17:38     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-88 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-008

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.24.2020 01:55     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 66                | %            | 70-130        | 11.24.2020 01:55     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.24.2020 01:55     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-89 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-009

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.33   | 5.04 | mg/kg | 11.21.2020 20:38 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 17:58     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 17:58     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 17:58     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 17:58     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 104               | %            | 70-130        | 11.23.2020 17:58     |             |     |
| o-Terphenyl                        | 84-15-1           | 154               | %            | 70-130        | 11.23.2020 17:58     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-89 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-009

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:

Seq Number: 3143127

Basis: Wet Weight

| Parameter     | Cas Number  | Result    | RL       | Units | Analysis Date    | Flag | Dil |
|---------------|-------------|-----------|----------|-------|------------------|------|-----|
| Benzene       | 71-43-2     | <0.00199  | 0.00199  | mg/kg | 11.24.2020 02:21 | U    | 1   |
| Toluene       | 108-88-3    | <0.00199  | 0.00199  | mg/kg | 11.24.2020 02:21 | U    | 1   |
| Ethylbenzene  | 100-41-4    | <0.00199  | 0.00199  | mg/kg | 11.24.2020 02:21 | U    | 1   |
| m,p-Xylenes   | 179601-23-1 | <0.00398  | 0.00398  | mg/kg | 11.24.2020 02:21 | U    | 1   |
| o-Xylene      | 95-47-6     | <0.00199  | 0.00199  | mg/kg | 11.24.2020 02:21 | U    | 1   |
| Total Xylenes | 1330-20-7   | <0.001990 | 0.001990 | mg/kg | 11.24.2020 02:21 | U    | 1   |
| Total BTEX    |             | <0.001990 | 0.001990 | mg/kg | 11.24.2020 02:21 | U    | 1   |

| Surrogate            | Cas Number | % Recovery | Units | Limits | Analysis Date    | Flag |
|----------------------|------------|------------|-------|--------|------------------|------|
| 1,4-Difluorobenzene  | 540-36-3   | 106        | %     | 70-130 | 11.24.2020 02:21 |      |
| 4-Bromofluorobenzene | 460-00-4   | 144        | %     | 70-130 | 11.24.2020 02:21 | **   |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-90 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-010

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:25

% Moisture:

Seq Number: 3143041

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.92   | 4.96 | mg/kg | 11.21.2020 20:43 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:17     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:17     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:17     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 18:17     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 86                | %            | 70-130        | 11.23.2020 18:17     |             |     |
| o-Terphenyl                        | 84-15-1           | 128               | %            | 70-130        | 11.23.2020 18:17     |             |     |





# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-90 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-010

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 12:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143127

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 02:47     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 107               | %            | 70-130        | 11.24.2020 02:47     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 147               | %            | 70-130        | 11.24.2020 02:47     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-91 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-011

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:45

% Moisture:

Seq Number: 3143042

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.58   | 5.00 | mg/kg | 11.21.2020 21:15 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 18:37     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 18:37     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 18:37     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 18:37     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 103               | %            | 70-130        | 11.23.2020 18:37     |             |     |
| o-Terphenyl                        | 84-15-1           | 150               | %            | 70-130        | 11.23.2020 18:37     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-91 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-011

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.22.2020 20:09     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 128               | %            | 70-130        | 11.22.2020 20:09     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.22.2020 20:09     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-92 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-012

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:45

% Moisture:

Seq Number: 3143042

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.16   | 4.95 | mg/kg | 11.21.2020 21:31 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:56     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:56     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 18:56     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 18:56     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 92                | %            | 70-130        | 11.23.2020 18:56     |             |     |
| o-Terphenyl                        | 84-15-1           | 137               | %            | 70-130        | 11.23.2020 18:56     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-92 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-012

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.22.2020 20:30     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.22.2020 20:30     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.22.2020 20:30     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-93 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-013

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:45

% Moisture:

Seq Number: 3143042

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.19   | 5.02 | mg/kg | 11.21.2020 21:36 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 19:15     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 19:15     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 19:15     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 19:15     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 100               | %            | 70-130        | 11.23.2020 19:15     |             |     |
| o-Terphenyl                        | 84-15-1           | 149               | %            | 70-130        | 11.23.2020 19:15     | **          |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-93 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-013

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 20:50     | UXF         | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 20:50     | UX          | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 20:50     | UX          | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.22.2020 20:50     | UX          | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 20:50     | UX          | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 20:50     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 20:50     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.22.2020 20:50     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 124               | %            | 70-130        | 11.22.2020 20:50     |             |     |



# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-94 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-014

Date Collected: 11.16.2020 00:00

Analytical Method: Inorganic Anions by EPA 300/300.1

Prep Method: E300P

Tech: CHE

Analyst: CHE

Date Prep: 11.21.2020 13:45

% Moisture:

Seq Number: 3143042

Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.28   | 4.99 | mg/kg | 11.21.2020 21:42 |      | 1   |

Analytical Method: TPH By SW8015 Mod

Prep Method: SW8015P

Tech: DVM

Analyst: ARM

Date Prep: 11.23.2020 10:00

% Moisture:

Seq Number: 3143174

Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 19:35     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 19:35     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 19:35     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 19:35     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 88                | %            | 70-130        | 11.23.2020 19:35     |             |     |
| o-Terphenyl                        | 84-15-1           | 134               | %            | 70-130        | 11.23.2020 19:35     | **          |     |





# Certificate of Analytical Results 678618

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Bottom Hole-94 (4.5'BEB)**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678618-014

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 21:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.22.2020 21:11     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.22.2020 21:11     |             |     |

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.      **ND** Not Detected.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK** Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS** Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



### Tetra Tech- Midland

#### Caballo Riser

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143041

Matrix: Solid

Prep Method: E300P

Date Prep: 11.21.2020

MB Sample Id: 7715730-1-BLK

LCS Sample Id: 7715730-1-BKS

LCSD Sample Id: 7715730-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 258        | 103      | 260         | 104       | 90-110 | 1    | 20        | mg/kg | 11.21.2020 18:10 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143042

Matrix: Solid

Prep Method: E300P

Date Prep: 11.21.2020

MB Sample Id: 7715731-1-BLK

LCS Sample Id: 7715731-1-BKS

LCSD Sample Id: 7715731-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 260        | 104      | 260         | 104       | 90-110 | 0    | 20        | mg/kg | 11.21.2020 21:04 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143041

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678615-044

MS Sample Id: 678615-044 S

MSD Sample Id: 678615-044 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 882           | 251          | 1110      | 91      | 1100       | 87       | 90-110 | 1    | 20        | mg/kg | 11.21.2020 18:26 | X    |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143041

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678618-001

MS Sample Id: 678618-001 S

MSD Sample Id: 678618-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 7.36          | 250          | 259       | 101     | 259        | 101      | 90-110 | 0    | 20        | mg/kg | 11.21.2020 19:40 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143042

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678618-011

MS Sample Id: 678618-011 S

MSD Sample Id: 678618-011 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 7.58          | 250          | 267       | 104     | 266        | 103      | 90-110 | 0    | 20        | mg/kg | 11.21.2020 21:21 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143042

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678621-007

MS Sample Id: 678621-007 S

MSD Sample Id: 678621-007 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 691           | 248          | 910       | 88      | 909        | 88       | 90-110 | 0    | 20        | mg/kg | 11.21.2020 22:34 | X    |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

### Tetra Tech- Midland

#### Caballo Riser

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3143174

MB Sample Id: 7715842-1-BLK

Matrix: Solid

LCS Sample Id: 7715842-1-BKS

Prep Method: SW8015P

Date Prep: 11.23.2020

LCSD Sample Id: 7715842-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 919        | 92       | 885         | 89        | 70-130 | 4    | 20        | mg/kg | 11.23.2020 12:26 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 994        | 99       | 960         | 96        | 70-130 | 3    | 20        | mg/kg | 11.23.2020 12:26 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 93      |         | 127      |          | 114       |           | 70-130 | %     | 11.23.2020 12:26 |
| o-Terphenyl    | 100     |         | 129      |          | 98        |           | 70-130 | %     | 11.23.2020 12:26 |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3143311

MB Sample Id: 7715938-1-BLK

Matrix: Solid

LCS Sample Id: 7715938-1-BKS

Prep Method: SW8015P

Date Prep: 11.24.2020

LCSD Sample Id: 7715938-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 1050       | 105      | 1090        | 109       | 70-130 | 4    | 20        | mg/kg | 11.24.2020 12:16 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 1130       | 113      | 1090        | 109       | 70-130 | 4    | 20        | mg/kg | 11.24.2020 12:16 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 103     |         | 129      |          | 120       |           | 70-130 | %     | 11.24.2020 12:16 |
| o-Terphenyl    | 105     |         | 118      |          | 104       |           | 70-130 | %     | 11.24.2020 12:16 |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3143174

Matrix: Solid

MB Sample Id: 7715842-1-BLK

Prep Method: SW8015P

Date Prep: 11.23.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.23.2020 12:07 |      |

**Analytical Method: TPH By SW8015 Mod**

Seq Number: 3143311

Matrix: Solid

MB Sample Id: 7715938-1-BLK

Prep Method: SW8015P

Date Prep: 11.24.2020

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.24.2020 11:53 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

## Tetra Tech- Midland

Caballo Riser

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143174

Parent Sample Id: 678620-041

Matrix: Soil

MS Sample Id: 678620-041 S

Prep Method: SW8015P

Date Prep: 11.23.2020

MSD Sample Id: 678620-041 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 998          | 892       | 89      | 838        | 84       | 70-130 | 6    | 20        | mg/kg | 11.23.2020 13:25 |      |
| Diesel Range Organics (DRO)       | <49.9         | 998          | 905       | 91      | 903        | 91       | 70-130 | 0    | 20        | mg/kg | 11.23.2020 13:25 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 104     |         | 104      |          | 70-130 | %     | 11.23.2020 13:25 |
| o-Terphenyl    | 123     |         | 120      |          | 70-130 | %     | 11.23.2020 13:25 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143311

Parent Sample Id: 678617-001

Matrix: Soil

MS Sample Id: 678617-001 S

Prep Method: SW8015P

Date Prep: 11.24.2020

MSD Sample Id: 678617-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 998          | 990       | 99      | 949        | 95       | 70-130 | 4    | 20        | mg/kg | 11.24.2020 13:23 |      |
| Diesel Range Organics (DRO)       | <49.9         | 998          | 962       | 96      | 1030       | 103      | 70-130 | 7    | 20        | mg/kg | 11.24.2020 13:23 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 105     |         | 110      |          | 70-130 | %     | 11.24.2020 13:23 |
| o-Terphenyl    | 91      |         | 99       |          | 70-130 | %     | 11.24.2020 13:23 |

## Analytical Method: BTEX by EPA 8021B

Seq Number: 3142980

MB Sample Id: 7715740-1-BLK

Matrix: Solid

LCS Sample Id: 7715740-1-BKS

Prep Method: SW5035A

Date Prep: 11.21.2020

LCSD Sample Id: 7715740-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0881     | 88       | 0.0850      | 85        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |
| Toluene      | <0.00200  | 0.100        | 0.0892     | 89       | 0.0859      | 86        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0961     | 96       | 0.0934      | 93        | 70-130 | 3    | 35        | mg/kg | 11.22.2020 17:49 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.190      | 95       | 0.188       | 94        | 70-130 | 1    | 35        | mg/kg | 11.22.2020 17:49 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0945     | 95       | 0.0911      | 91        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |

## Surrogate

|                      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 94      |         | 97       |          | 97        |           | 70-130 | %     | 11.22.2020 17:49 |
| 4-Bromofluorobenzene | 121     |         | 104      |          | 108       |           | 70-130 | %     | 11.22.2020 17:49 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143127

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.23.2020

MB Sample Id: 7715851-1-BLK

LCS Sample Id: 7715851-1-BKS

LCSD Sample Id: 7715851-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0974     | 97       | 0.0951      | 95        | 70-130 | 2    | 35        | mg/kg | 11.23.2020 14:42 |      |
| Toluene      | <0.00200  | 0.100        | 0.0988     | 99       | 0.0875      | 88        | 70-130 | 12   | 35        | mg/kg | 11.23.2020 14:42 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.106      | 106      | 0.101       | 101       | 70-130 | 5    | 35        | mg/kg | 11.23.2020 14:42 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.209      | 105      | 0.200       | 100       | 70-130 | 4    | 35        | mg/kg | 11.23.2020 14:42 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.105      | 105      | 0.100       | 100       | 70-130 | 5    | 35        | mg/kg | 11.23.2020 14:42 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 91      |         | 104      |          | 100       |           | 70-130 | %     | 11.23.2020 14:42 |
| 4-Bromofluorobenzene | 86      |         | 117      |          | 119       |           | 70-130 | %     | 11.23.2020 14:42 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142980

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.21.2020

Parent Sample Id: 678618-013

MS Sample Id: 678618-013 S

MSD Sample Id: 678618-013 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00202      | 0.101        | 0.0228    | 23      | 0.0419     | 41       | 70-130 | 59   | 35        | mg/kg | 11.22.2020 18:29 | XF   |
| Toluene      | <0.00202      | 0.101        | 0.0160    | 16      | 0.0209     | 21       | 70-130 | 27   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| Ethylbenzene | <0.00202      | 0.101        | 0.0278    | 28      | 0.0349     | 35       | 70-130 | 23   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| m,p-Xylenes  | <0.00404      | 0.202        | 0.0453    | 22      | 0.0549     | 27       | 70-130 | 19   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| o-Xylene     | <0.00202      | 0.101        | 0.0427    | 42      | 0.0520     | 51       | 70-130 | 20   | 35        | mg/kg | 11.22.2020 18:29 | X    |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 89      |         | 97       |          | 70-130 | %     | 11.22.2020 18:29 |
| 4-Bromofluorobenzene | 131     | **      | 112      |          | 70-130 | %     | 11.22.2020 18:29 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143127

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.23.2020

Parent Sample Id: 678617-006

MS Sample Id: 678617-006 S

MSD Sample Id: 678617-006 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00198      | 0.0990       | 0.0652    | 66      | 0.0381     | 38       | 70-130 | 52   | 35        | mg/kg | 11.23.2020 15:34 | XF   |
| Toluene      | <0.00198      | 0.0990       | 0.0496    | 50      | 0.0223     | 22       | 70-130 | 76   | 35        | mg/kg | 11.23.2020 15:34 | XF   |
| Ethylbenzene | <0.00198      | 0.0990       | 0.0413    | 42      | 0.0212     | 21       | 70-130 | 64   | 35        | mg/kg | 11.23.2020 15:34 | XF   |
| m,p-Xylenes  | <0.00396      | 0.198        | 0.0787    | 40      | 0.0366     | 18       | 70-130 | 73   | 35        | mg/kg | 11.23.2020 15:34 | XF   |
| o-Xylene     | <0.00198      | 0.0990       | 0.0434    | 44      | 0.0229     | 23       | 70-130 | 62   | 35        | mg/kg | 11.23.2020 15:34 | XF   |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 110     |         | 105      |          | 70-130 | %     | 11.23.2020 15:34 |
| 4-Bromofluorobenzene | 122     |         | 65       | **       | 70-130 | %     | 11.23.2020 15:34 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

**Tetra Tech, Inc.**

901 W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

~~678~~ 678619  
Page

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## Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

901W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

2078618

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(Circle) HAND DELIVERED FEDEX UPS Tracking #



# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 11.20.2020 02:19.00 PM

Work Order #: 678618

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR8

| Sample Receipt Checklist                                | Comments |
|---------------------------------------------------------|----------|
| #1 *Temperature of cooler(s)?                           | 2.5      |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | N/A      |
| #5 Custody Seals intact on sample bottles?              | N/A      |
| #6 *Custody Seals Signed and dated?                     | N/A      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | No       |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | N/A      |
| #18 Water VOC samples have zero headspace?              | N/A      |

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 11.20.2020

Checklist reviewed by:



Jessica Kramer

Date: 11.20.2020

## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-001         | 678620-002         | 678620-003         | 678620-004         | 678620-005         | 678620-006         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 1         | Sidewall 2         | Sidewall 3         | Sidewall 4         | Sidewall 5         | Sidewall 6         |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   |
|                                          | <i>Analyzed:</i>  | 11.22.2020 21:31   | 11.22.2020 21:51   | 11.22.2020 22:12   | 11.22.2020 22:32   | 11.22.2020 22:53   | 11.22.2020 23:13   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00200 0.00200   |
| Toluene                                  |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00200 0.00200   |
| Ethylbenzene                             |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00200 0.00200   |
| m,p-Xylenes                              |                   | <0.00398 0.00398   | <0.00400 0.00400   | <0.00397 0.00397   | <0.00403 0.00403   | <0.00398 0.00398   | <0.00400 0.00400   |
| o-Xylene                                 |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00200 0.00200   |
| Total Xylenes                            |                   | <0.001990 0.001990 | <0.002000 0.002000 | <0.001980 0.001980 | <0.002020 0.002020 | <0.001990 0.001990 | <0.002000 0.002000 |
| Total BTEX                               |                   | <0.001990 0.001990 | <0.002000 0.002000 | <0.001980 0.001980 | <0.002020 0.002020 | <0.001990 0.001990 | <0.002000 0.002000 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 01:09   | 11.21.2020 01:25   | 11.21.2020 01:30   | 11.21.2020 01:35   | 11.21.2020 01:41   | 11.21.2020 01:56   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 235 4.95           | 10.4 5.04          | 6.71 4.96          | 6.53 4.99          | 7.79 5.02          | 7.56 4.97          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 21:23   | 11.23.2020 22:29   | 11.23.2020 22:51   | 11.23.2020 23:13   | 11.23.2020 23:36   | 11.23.2020 23:58   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         |
| Total TPH                                |                   | <50.00 50.00       | <50.00 50.00       | <50.00 50.00       | <49.90 49.90       | <50.00 50.00       | <50.00 50.00       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 678620



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-007         | 678620-008         | 678620-009         | 678620-010         | 678620-011         | 678620-012         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 7         | Sidewall 8         | Sidewall 9         | Sidewall 10        | Sidewall 11        | Sidewall 12        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 00:35   | 11.23.2020 00:56   | 11.23.2020 01:16   | 11.23.2020 01:36   | 11.23.2020 01:57   | 11.23.2020 02:17   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00200 0.00200   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00200 0.00200   | <0.00199 0.00199   | <0.00200 0.00200   |
| Toluene                                  |                   | <0.00200 0.00200   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00200 0.00200   | <0.00199 0.00199   | <0.00200 0.00200   |
| Ethylbenzene                             |                   | <0.00200 0.00200   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00200 0.00200   | <0.00199 0.00199   | <0.00200 0.00200   |
| m,p-Xylenes                              |                   | <0.00399 0.00399   | <0.00402 0.00402   | <0.00403 0.00403   | <0.00399 0.00399   | <0.00398 0.00398   | <0.00400 0.00400   |
| o-Xylene                                 |                   | <0.00200 0.00200   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00200 0.00200   | <0.00199 0.00199   | <0.00200 0.00200   |
| Total Xylenes                            |                   | <0.002000 0.002000 | <0.002010 0.002010 | <0.002020 0.002020 | <0.002000 0.002000 | <0.001990 0.001990 | <0.002000 0.002000 |
| Total BTEX                               |                   | <0.002000 0.002000 | <0.002010 0.002010 | <0.002020 0.002020 | <0.002000 0.002000 | <0.001990 0.001990 | <0.002000 0.002000 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 02:02   | 11.21.2020 02:07   | 11.21.2020 02:12   | 11.21.2020 02:17   | 11.21.2020 02:23   | 11.21.2020 02:38   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 71.6 5.05          | 208 5.05           | 7.34 4.99          | 8.23 4.95          | 8.02 4.95          | 7.54 4.95          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.24.2020 00:20   | 11.24.2020 00:43   | 11.24.2020 01:05   | 11.24.2020 01:27   | 11.24.2020 02:12   | 11.24.2020 02:34   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.9 49.9         | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Diesel Range Organics (DRO)              |                   | <49.9 49.9         | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.9 49.9         | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Total TPH                                |                   | <49.90 49.90       | <49.80 49.80       | <50.00 50.00       | <49.90 49.90       | <50.00 50.00       | <49.90 49.90       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

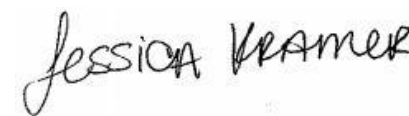
Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-013         | 678620-014         | 678620-015         | 678620-016         | 678620-017         | 678620-018         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 13        | Sidewall 14        | Sidewall 15        | Sidewall 16        | Sidewall 17        | Sidewall 18        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.21.2020 17:00   | 11.22.2020 16:00   | 11.22.2020 16:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 02:38   | 11.23.2020 02:58   | 11.23.2020 03:19   | 11.23.2020 03:40   | 11.23.2020 07:09   | 11.23.2020 07:29   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00201 0.00201   | <0.00198 0.00198   | <0.00200 0.00200   |
| Toluene                                  |                   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00201 0.00201   | <0.00198 0.00198   | <0.00200 0.00200   |
| Ethylbenzene                             |                   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00201 0.00201   | <0.00198 0.00198   | <0.00200 0.00200   |
| m,p-Xylenes                              |                   | <0.00399 0.00399   | <0.00403 0.00403   | <0.00398 0.00398   | <0.00402 0.00402   | <0.00396 0.00396   | <0.00399 0.00399   |
| o-Xylene                                 |                   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00199 0.00199   | <0.00201 0.00201   | <0.00198 0.00198   | <0.00200 0.00200   |
| Total Xylenes                            |                   | <0.002000 0.002000 | <0.002020 0.002020 | <0.001990 0.001990 | <0.002010 0.002010 | <0.001980 0.001980 | <0.002000 0.002000 |
| Total BTEX                               |                   | <0.002000 0.002000 | <0.002020 0.002020 | <0.001990 0.001990 | <0.002010 0.002010 | <0.001980 0.001980 | <0.002000 0.002000 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 17:00   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 02:44   | 11.21.2020 03:00   | 11.21.2020 03:05   | 11.21.2020 03:10   | 11.21.2020 03:15   | 11.21.2020 03:21   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 31.5 5.02          | 347 5.00           | 13.6 5.00          | 9.00 5.00          | 7.33 4.96          | 8.06 4.98          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.24.2020 02:56   | 11.24.2020 03:19   | 11.24.2020 03:41   | 11.24.2020 04:03   | 11.24.2020 04:25   | 11.24.2020 04:48   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <49.9 49.9         |
| Total TPH                                |                   | <49.80 49.80       | <50.00 50.00       | <50.00 50.00       | <49.90 49.90       | <50.00 50.00       | <49.90 49.90       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 678620



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-019         | 678620-020         | 678620-021         | 678620-022         | 678620-023         | 678620-024         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 19        | Sidewall 20        | Sidewall 21        | Sidewall 22        | Sidewall 23        | Sidewall 24        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 07:50   | 11.23.2020 08:11   | 11.23.2020 08:31   | 11.23.2020 08:52   | 11.23.2020 09:13   | 11.23.2020 09:33   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00199 0.00199   |
| Toluene                                  |                   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00199 0.00199   |
| Ethylbenzene                             |                   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00199 0.00199   |
| m,p-Xylenes                              |                   | <0.00397 0.00397   | <0.00398 0.00398   | <0.00401 0.00401   | <0.00399 0.00399   | <0.00400 0.00400   | <0.00398 0.00398   |
| o-Xylene                                 |                   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00199 0.00199   |
| Total Xylenes                            |                   | <0.001980 0.001980 | <0.001990 0.001990 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002000 0.002000 | <0.001990 0.001990 |
| Total BTEX                               |                   | <0.001980 0.001980 | <0.001990 0.001990 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002000 0.002000 | <0.001990 0.001990 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 17:00   | 11.20.2020 17:00   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 03:26   | 11.21.2020 03:31   | 11.20.2020 22:15   | 11.20.2020 22:30   | 11.20.2020 22:36   | 11.20.2020 22:41   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 6.51 5.02          | 7.86 5.00          | 8.57 5.03          | 376 4.96           | 13.9 4.98          | 7.36 5.04          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.24.2020 05:10   | 11.24.2020 05:33   | 11.23.2020 21:23   | 11.23.2020 22:29   | 11.23.2020 22:51   | 11.23.2020 23:13   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         | <50.0 50.0         | <50.0 50.0         |
| Total TPH                                |                   | <49.80 49.80       | <50.00 50.00       | <50.00 50.00       | <49.80 49.80       | <50.00 50.00       | <50.00 50.00       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

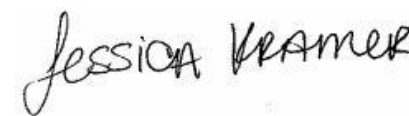
Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-025         | 678620-026         | 678620-027         | 678620-028         | 678620-029         | 678620-030         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 25        | Sidewall 26        | Sidewall 27        | Sidewall 28        | Sidewall 29        | Sidewall 30        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 09:54   | 11.23.2020 10:14   | 11.23.2020 11:38   | 11.23.2020 11:58   | 11.23.2020 12:19   | 11.23.2020 12:39   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00201 0.00201   |
| Toluene                                  |                   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00201 0.00201   |
| Ethylbenzene                             |                   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00201 0.00201   |
| m,p-Xylenes                              |                   | <0.00398 0.00398   | <0.00398 0.00398   | <0.00399 0.00399   | <0.00399 0.00399   | <0.00400 0.00400   | <0.00402 0.00402   |
| o-Xylene                                 |                   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00201 0.00201   |
| Total Xylenes                            |                   | <0.001990 0.001990 | <0.001990 0.001990 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002010 0.002010 |
| Total BTEX                               |                   | <0.001990 0.001990 | <0.001990 0.001990 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002000 0.002000 | <0.002010 0.002010 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   |
|                                          | <i>Analyzed:</i>  | 11.20.2020 22:46   | 11.20.2020 23:02   | 11.20.2020 23:07   | 11.20.2020 23:13   | 11.20.2020 23:18   | 11.20.2020 23:23   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 6.96 4.95          | 14.0 5.05          | 7.21 4.99          | 40.8 5.05          | 104 4.96           | 13.4 5.02          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 23:36   | 11.23.2020 23:58   | 11.24.2020 00:20   | 11.24.2020 00:43   | 11.24.2020 01:05   | 11.24.2020 01:27   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         |
| Diesel Range Organics (DRO)              |                   | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         |
| Total TPH                                |                   | <49.90 49.90       | <50.00 50.00       | <50.00 50.00       | <50.00 50.00       | <50.00 50.00       | <49.90 49.90       |

BRL - Below Reporting Limit

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## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-031         | 678620-032         | 678620-033         | 678620-034         | 678620-035         | 678620-036         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 31        | Sidewall 32        | Sidewall 33        | Sidewall 34        | Sidewall 35        | Sidewall 36        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   | 11.22.2020 16:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 12:59   | 11.23.2020 13:20   | 11.23.2020 13:40   | 11.23.2020 14:01   | 11.23.2020 14:21   | 11.23.2020 14:42   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00199 0.00199   |
| Toluene                                  |                   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00199 0.00199   |
| Ethylbenzene                             |                   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00199 0.00199   |
| m,p-Xylenes                              |                   | <0.00399 0.00399   | <0.00397 0.00397   | <0.00398 0.00398   | <0.00398 0.00398   | <0.00401 0.00401   | <0.00398 0.00398   |
| o-Xylene                                 |                   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00199 0.00199   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00199 0.00199   |
| Total Xylenes                            |                   | <0.002000 0.002000 | <0.001980 0.001980 | <0.001990 0.001990 | <0.001990 0.001990 | <0.002000 0.002000 | <0.001990 0.001990 |
| Total BTEX                               |                   | <0.002000 0.002000 | <0.001980 0.001980 | <0.001990 0.001990 | <0.001990 0.001990 | <0.002000 0.002000 | <0.001990 0.001990 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   |
|                                          | <i>Analyzed:</i>  | 11.20.2020 23:28   | 11.20.2020 23:44   | 11.20.2020 23:49   | 11.21.2020 00:05   | 11.21.2020 00:11   | 11.21.2020 00:16   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 206 5.00           | 455 5.05           | 55.5 4.98          | 56.1 4.95          | 12.4 5.04          | 7.01 4.95          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.24.2020 02:12   | 11.24.2020 02:34   | 11.24.2020 02:56   | 11.24.2020 03:19   | 11.24.2020 03:41   | 11.24.2020 04:03   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         |
| Total TPH                                |                   | <49.80 49.80       | <49.90 49.90       | <50.00 50.00       | <50.00 50.00       | <49.90 49.90       | <50.00 50.00       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-037         | 678620-038         | 678620-039         | 678620-040         | 678620-041         | 678620-042         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 37        | Sidewall 38        | Sidewall 39        | Sidewall 40        | Sidewall 41        | Sidewall 42        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 18:58   | 11.23.2020 19:19   | 11.23.2020 19:39   | 11.23.2020 20:00   | 11.23.2020 20:20   | 11.23.2020 20:40   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00201 0.00201   | <0.00201 0.00201   | <0.00198 0.00198   |
| Toluene                                  |                   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00201 0.00201   | <0.00201 0.00201   | <0.00198 0.00198   |
| Ethylbenzene                             |                   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00201 0.00201   | <0.00201 0.00201   | <0.00198 0.00198   |
| m,p-Xylenes                              |                   | <0.00399 0.00399   | <0.00399 0.00399   | <0.00403 0.00403   | <0.00402 0.00402   | <0.00402 0.00402   | <0.00397 0.00397   |
| o-Xylene                                 |                   | <0.00200 0.00200   | <0.00200 0.00200   | <0.00202 0.00202   | <0.00201 0.00201   | <0.00201 0.00201   | <0.00198 0.00198   |
| Total Xylenes                            |                   | <0.002000 0.002000 | <0.002000 0.002000 | <0.002020 0.002020 | <0.002010 0.002010 | <0.002010 0.002010 | <0.001980 0.001980 |
| Total BTEX                               |                   | <0.002000 0.002000 | <0.002000 0.002000 | <0.002020 0.002020 | <0.002010 0.002010 | <0.002010 0.002010 | <0.001980 0.001980 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.20.2020 16:40   | 11.21.2020 11:40   | 11.21.2020 11:40   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 00:21   | 11.21.2020 00:27   | 11.21.2020 00:32   | 11.21.2020 00:37   | 11.21.2020 12:31   | 11.21.2020 12:47   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 117 5.00           | 56.6 5.03          | 9.70 5.00          | 6.82 5.00          | 8.91 5.00          | 6.60 5.05          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.24.2020 04:25   | 11.24.2020 04:48   | 11.24.2020 05:10   | 11.24.2020 05:33   | 11.23.2020 13:06   | 11.23.2020 14:04   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         |
| Diesel Range Organics (DRO)              |                   | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <49.8 49.8         | <50.0 50.0         | <49.9 49.9         | <50.0 50.0         | <50.0 50.0         | <49.8 49.8         |
| Total TPH                                |                   | <49.80 49.80       | <50.00 50.00       | <49.90 49.90       | <50.00 50.00       | <50.00 50.00       | <49.80 49.80       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico





## Certificate of Analysis Summary 678620



Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

| <i>Analysis Requested</i>                | <i>Lab Id:</i>    | 678620-043         | 678620-044         | 678620-045         | 678620-046         | 678620-047         | 678620-048         |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|                                          | <i>Field Id:</i>  | Sidewall 43        | Sidewall 44        | Sidewall 45        | Sidewall 46        | Sidewall 47        | Sidewall 48        |
|                                          | <i>Depth:</i>     |                    |                    |                    |                    |                    |                    |
|                                          | <i>Matrix:</i>    | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               | SOIL               |
|                                          | <i>Sampled:</i>   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   | 11.16.2020 00:00   |
| <b>BTEX by EPA 8021B</b>                 | <i>Extracted:</i> | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   | 11.23.2020 14:15   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 21:01   | 11.23.2020 21:21   | 11.23.2020 23:26   | 11.23.2020 23:46   | 11.24.2020 00:06   | 11.24.2020 00:27   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Benzene                                  |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00199 0.00199   |
| Toluene                                  |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00199 0.00199   |
| Ethylbenzene                             |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00199 0.00199   |
| m,p-Xylenes                              |                   | <0.00398 0.00398   | <0.00400 0.00400   | <0.00397 0.00397   | <0.00402 0.00402   | <0.00403 0.00403   | <0.00398 0.00398   |
| o-Xylene                                 |                   | <0.00199 0.00199   | <0.00200 0.00200   | <0.00198 0.00198   | <0.00201 0.00201   | <0.00202 0.00202   | <0.00199 0.00199   |
| Total Xylenes                            |                   | <0.001990 0.001990 | <0.002000 0.002000 | <0.001980 0.001980 | <0.002010 0.002010 | <0.002020 0.002020 | <0.001990 0.001990 |
| Total BTEX                               |                   | <0.001990 0.001990 | <0.002000 0.002000 | <0.001980 0.001980 | <0.002010 0.002010 | <0.002020 0.002020 | <0.001990 0.001990 |
| <b>Inorganic Anions by EPA 300/300.1</b> | <i>Extracted:</i> | 11.21.2020 11:40   | 11.21.2020 11:40   | 11.21.2020 11:40   | 11.21.2020 11:40   | 11.21.2020 11:40   | 11.21.2020 11:40   |
|                                          | <i>Analyzed:</i>  | 11.21.2020 12:52   | 11.21.2020 12:57   | 11.21.2020 13:03   | 11.21.2020 13:18   | 11.21.2020 13:24   | 11.21.2020 13:29   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Chloride                                 |                   | 7.67 4.98          | 7.20 5.00          | 6.50 4.99          | 5.96 5.03          | 7.35 4.96          | 7.56 4.95          |
| <b>TPH By SW8015 Mod</b>                 | <i>Extracted:</i> | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   | 11.23.2020 10:00   |
|                                          | <i>Analyzed:</i>  | 11.23.2020 14:24   | 11.23.2020 14:43   | 11.23.2020 15:03   | 11.23.2020 15:22   | 11.23.2020 15:42   | 11.23.2020 16:01   |
|                                          | <i>Units/RL:</i>  | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           | mg/kg RL           |
| Gasoline Range Hydrocarbons (GRO)        |                   | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <49.9 49.9         | <50.0 50.0         | <49.8 49.8         |
| Diesel Range Organics (DRO)              |                   | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <49.9 49.9         | <50.0 50.0         | <49.8 49.8         |
| Motor Oil Range Hydrocarbons (MRO)       |                   | <50.0 50.0         | <50.0 50.0         | <49.9 49.9         | <49.9 49.9         | <50.0 50.0         | <49.8 49.8         |
| Total TPH                                |                   | <50.00 50.00       | <50.00 50.00       | <49.90 49.90       | <49.90 49.90       | <50.00 50.00       | <49.80 49.80       |

BRL - Below Reporting Limit

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

## Certificate of Analysis Summary 678620

Tetra Tech- Midland, Midland, TX

Project Name: Caballo Riser

Project Id: 212C-MD-02256

Contact: Mike Carmona

Project Location: Lea Co NM

Date Received in Lab: Fri 11.20.2020 14:19

Report Date: 11.24.2020 15:23

Project Manager: Jessica Kramer

|                                          |                                                                                                                                       |  |  |  |  |  |
|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| <b>Analysis Requested</b>                | <b>Lab Id:</b> 678620-049<br><b>Field Id:</b> Sidewall 49<br><b>Depth:</b><br><b>Matrix:</b> SOIL<br><b>Sampled:</b> 11.16.2020 00:00 |  |  |  |  |  |
| <b>BTEX by EPA 8021B</b>                 | <b>Extracted:</b> 11.23.2020 14:15<br><b>Analyzed:</b> 11.24.2020 00:47<br><b>Units/RL:</b> mg/kg RL                                  |  |  |  |  |  |
| Benzene                                  | <0.00200 0.00200                                                                                                                      |  |  |  |  |  |
| Toluene                                  | <0.00200 0.00200                                                                                                                      |  |  |  |  |  |
| Ethylbenzene                             | <0.00200 0.00200                                                                                                                      |  |  |  |  |  |
| m,p-Xylenes                              | <0.00399 0.00399                                                                                                                      |  |  |  |  |  |
| o-Xylene                                 | <0.00200 0.00200                                                                                                                      |  |  |  |  |  |
| Total Xylenes                            | <0.002000 0.002000                                                                                                                    |  |  |  |  |  |
| Total BTEX                               | <0.002000 0.002000                                                                                                                    |  |  |  |  |  |
| <b>Inorganic Anions by EPA 300/300.1</b> | <b>Extracted:</b> 11.21.2020 11:40<br><b>Analyzed:</b> 11.21.2020 13:34<br><b>Units/RL:</b> mg/kg RL                                  |  |  |  |  |  |
| Chloride                                 | 7.68 5.04                                                                                                                             |  |  |  |  |  |
| <b>TPH By SW8015 Mod</b>                 | <b>Extracted:</b> 11.23.2020 10:00<br><b>Analyzed:</b> 11.23.2020 16:21<br><b>Units/RL:</b> mg/kg RL                                  |  |  |  |  |  |
| Gasoline Range Hydrocarbons (GRO)        | <50.0 50.0                                                                                                                            |  |  |  |  |  |
| Diesel Range Organics (DRO)              | <50.0 50.0                                                                                                                            |  |  |  |  |  |
| Motor Oil Range Hydrocarbons (MRO)       | <50.0 50.0                                                                                                                            |  |  |  |  |  |
| Total TPH                                | <50.00 50.00                                                                                                                          |  |  |  |  |  |

BRL - Below Reporting Limit

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# Analytical Report 678620

for

**Tetra Tech- Midland**

**Project Manager: Mike Carmona**

**Caballo Riser**

**212C-MD-02256**

**11.24.2020**

Collected By: Client



**1211 W. Florida Ave  
Midland TX 79701**

Xenco-Houston (EPA Lab Code: TX00122):  
Texas (T104704215-20-38), Arizona (AZ0765), Florida (E871002-33), Louisiana (03054)  
Oklahoma (2020-014), North Carolina (681), Arkansas (20-035-0)

Xenco-Dallas (EPA Lab Code: TX01468):  
Texas (T104704295-20-26), Arizona (AZ0809)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-20-18)  
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-20-23)  
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-19-21)  
Xenco-Carlsbad (LELAP): Louisiana (05092)  
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-20-8)  
Xenco-Tampa: Florida (E87429), North Carolina (483)



11.24.2020

Project Manager: **Mike Carmona**

**Tetra Tech- Midland**

901 West Wall ST

Midland, TX 79701

Reference: Eurofins Xenco, LLC Report No(s): **678620**

**Caballo Riser**

Project Address: Lea Co NM

**Mike Carmona:**

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the Eurofins Xenco, LLC Report Number(s) 678620. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by Eurofins Xenco, LLC. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 678620 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting Eurofins Xenco, LLC to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads "Jessica Kramer".

**Jessica Kramer**

Project Manager

*A Small Business and Minority Company*

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico



## Sample Cross Reference 678620

## Tetra Tech- Midland, Midland, TX

## Caballo Riser

| Sample Id   | Matrix | Date Collected   | Sample Depth | Lab Sample Id |
|-------------|--------|------------------|--------------|---------------|
| Sidewall 1  | S      | 11.16.2020 00:00 |              | 678620-001    |
| Sidewall 2  | S      | 11.16.2020 00:00 |              | 678620-002    |
| Sidewall 3  | S      | 11.16.2020 00:00 |              | 678620-003    |
| Sidewall 4  | S      | 11.16.2020 00:00 |              | 678620-004    |
| Sidewall 5  | S      | 11.16.2020 00:00 |              | 678620-005    |
| Sidewall 6  | S      | 11.16.2020 00:00 |              | 678620-006    |
| Sidewall 7  | S      | 11.16.2020 00:00 |              | 678620-007    |
| Sidewall 8  | S      | 11.16.2020 00:00 |              | 678620-008    |
| Sidewall 9  | S      | 11.16.2020 00:00 |              | 678620-009    |
| Sidewall 10 | S      | 11.16.2020 00:00 |              | 678620-010    |
| Sidewall 11 | S      | 11.16.2020 00:00 |              | 678620-011    |
| Sidewall 12 | S      | 11.16.2020 00:00 |              | 678620-012    |
| Sidewall 13 | S      | 11.16.2020 00:00 |              | 678620-013    |
| Sidewall 14 | S      | 11.16.2020 00:00 |              | 678620-014    |
| Sidewall 15 | S      | 11.16.2020 00:00 |              | 678620-015    |
| Sidewall 16 | S      | 11.16.2020 00:00 |              | 678620-016    |
| Sidewall 17 | S      | 11.16.2020 00:00 |              | 678620-017    |
| Sidewall 18 | S      | 11.16.2020 00:00 |              | 678620-018    |
| Sidewall 19 | S      | 11.16.2020 00:00 |              | 678620-019    |
| Sidewall 20 | S      | 11.16.2020 00:00 |              | 678620-020    |
| Sidewall 21 | S      | 11.16.2020 00:00 |              | 678620-021    |
| Sidewall 22 | S      | 11.16.2020 00:00 |              | 678620-022    |
| Sidewall 23 | S      | 11.16.2020 00:00 |              | 678620-023    |
| Sidewall 24 | S      | 11.16.2020 00:00 |              | 678620-024    |
| Sidewall 25 | S      | 11.16.2020 00:00 |              | 678620-025    |
| Sidewall 26 | S      | 11.16.2020 00:00 |              | 678620-026    |
| Sidewall 27 | S      | 11.16.2020 00:00 |              | 678620-027    |
| Sidewall 28 | S      | 11.16.2020 00:00 |              | 678620-028    |
| Sidewall 29 | S      | 11.16.2020 00:00 |              | 678620-029    |
| Sidewall 30 | S      | 11.16.2020 00:00 |              | 678620-030    |
| Sidewall 31 | S      | 11.16.2020 00:00 |              | 678620-031    |
| Sidewall 32 | S      | 11.16.2020 00:00 |              | 678620-032    |
| Sidewall 33 | S      | 11.16.2020 00:00 |              | 678620-033    |
| Sidewall 34 | S      | 11.16.2020 00:00 |              | 678620-034    |
| Sidewall 35 | S      | 11.16.2020 00:00 |              | 678620-035    |
| Sidewall 36 | S      | 11.16.2020 00:00 |              | 678620-036    |
| Sidewall 37 | S      | 11.16.2020 00:00 |              | 678620-037    |
| Sidewall 38 | S      | 11.16.2020 00:00 |              | 678620-038    |
| Sidewall 39 | S      | 11.16.2020 00:00 |              | 678620-039    |
| Sidewall 40 | S      | 11.16.2020 00:00 |              | 678620-040    |
| Sidewall 41 | S      | 11.16.2020 00:00 |              | 678620-041    |
| Sidewall 42 | S      | 11.16.2020 00:00 |              | 678620-042    |
| Sidewall 43 | S      | 11.16.2020 00:00 |              | 678620-043    |

**Sample Cross Reference 678620****Tetra Tech- Midland, Midland, TX**

## Caballo Riser

|             |   |                  |            |
|-------------|---|------------------|------------|
| Sidewall 44 | S | 11.16.2020 00:00 | 678620-044 |
| Sidewall 45 | S | 11.16.2020 00:00 | 678620-045 |
| Sidewall 46 | S | 11.16.2020 00:00 | 678620-046 |
| Sidewall 47 | S | 11.16.2020 00:00 | 678620-047 |
| Sidewall 48 | S | 11.16.2020 00:00 | 678620-048 |
| Sidewall 49 | S | 11.16.2020 00:00 | 678620-049 |

**CASE NARRATIVE****Client Name: Tetra Tech- Midland****Project Name: Caballo Riser**

Project ID: 212C-MD-02256  
Work Order Number(s): 678620

Report Date: 11.24.2020  
Date Received: 11.20.2020

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**Sample receipt non conformances and comments:**

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**Sample receipt non conformances and comments per sample:**

None

**Analytical non conformances and comments:**

Batch: LBA-3142980 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered below QC limits. Matrix interferences is suspected.  
Samples affected are: 678620-015.

Batch: LBA-3143039 BTEX by EPA 8021B

Benzene Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 678620-017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036

Lab Sample ID 678620-017 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Benzene, Ethylbenzene, Toluene, m,p-Xylenes, o-Xylene recovered below QC limits in the Matrix Spike and Matrix Spike Duplicate. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 678620-017, -018, -019, -020, -021, -022, -023, -024, -025, -026, -027, -028, -029, -030, -031, -032, -033, -034, -035, -036.

The Laboratory Control Sample for Toluene, Benzene, m,p-Xylenes, Ethylbenzene, o-Xylene is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3143123 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.  
Samples affected are: 678620-049.

Batch: LBA-3143174 TPH By SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 678620-042,678620-044,678620-049,678620-047,678620-048,678620-045.

Batch: LBA-3143176 TPH By SW8015 Mod

Gasoline Range Hydrocarbons (GRO) RPD was outside laboratory control limits.

Samples in the analytical batch are: 678620-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012, -013, -014, -015, -016, -017, -018, -019, -020



## CASE NARRATIVE

***Client Name: Tetra Tech- Midland***

***Project Name: Caballo Riser***

Project ID: 212C-MD-02256  
Work Order Number(s): 678620

Report Date: 11.24.2020  
Date Received: 11.20.2020

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# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 1** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-001 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 235    | 4.95 | mg/kg | 11.21.2020 01:09 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.23.2020 21:23     |             |     |
| o-Terphenyl                        | 84-15-1           | 82                | %            | 70-130        | 11.23.2020 21:23     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 1**  
Lab Sample Id: 678620-001

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.22.2020 21:31     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 121               | %            | 70-130        | 11.22.2020 21:31     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.22.2020 21:31     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 2** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-002 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 10.4   | 5.04 | mg/kg | 11.21.2020 01:25 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:29     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.23.2020 22:29     |             |     |
| o-Terphenyl                        | 84-15-1           | 93                | %            | 70-130        | 11.23.2020 22:29     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 2**  
Lab Sample Id: 678620-002

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 21:51     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 122               | %            | 70-130        | 11.22.2020 21:51     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.22.2020 21:51     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 3** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-003 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.71   | 4.96 | mg/kg | 11.21.2020 01:30 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 90                | %            | 70-130        | 11.23.2020 22:51     |             |     |
| o-Terphenyl                        | 84-15-1           | 85                | %            | 70-130        | 11.23.2020 22:51     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 3**  
Lab Sample Id: 678620-003

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.22.2020 22:12     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.22.2020 22:12     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 119               | %            | 70-130        | 11.22.2020 22:12     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 4** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-004 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.53   | 4.99 | mg/kg | 11.21.2020 01:35 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:13     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 105               | %            | 70-130        | 11.23.2020 23:13     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.23.2020 23:13     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 4**  
Lab Sample Id: 678620-004

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.22.2020 22:32     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 125               | %            | 70-130        | 11.22.2020 22:32     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 96                | %            | 70-130        | 11.22.2020 22:32     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 5** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-005 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.79   | 5.02 | mg/kg | 11.21.2020 01:41 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:36     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.23.2020 23:36     |             |     |
| o-Terphenyl                        | 84-15-1           | 86                | %            | 70-130        | 11.23.2020 23:36     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 5**  
Lab Sample Id: 678620-005

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.22.2020 22:53     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 131               | %            | 70-130        | 11.22.2020 22:53     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 91                | %            | 70-130        | 11.22.2020 22:53     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 6** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-006 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.56   | 4.97 | mg/kg | 11.21.2020 01:56 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 94                | %            | 70-130        | 11.23.2020 23:58     |             |     |
| o-Terphenyl                        | 84-15-1           | 87                | %            | 70-130        | 11.23.2020 23:58     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 6**  
Lab Sample Id: 678620-006

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.22.2020 23:13     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 88                | %            | 70-130        | 11.22.2020 23:13     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 133               | %            | 70-130        | 11.22.2020 23:13     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 7** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-007 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 71.6   | 5.05 | mg/kg | 11.21.2020 02:02 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 00:20     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 101               | %            | 70-130        | 11.24.2020 00:20     |             |     |
| o-Terphenyl                        | 84-15-1           | 98                | %            | 70-130        | 11.24.2020 00:20     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 7**  
Lab Sample Id: 678620-007

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 00:35     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 123               | %            | 70-130        | 11.23.2020 00:35     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.23.2020 00:35     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 8** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-008 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 208    | 5.05 | mg/kg | 11.21.2020 02:07 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 00:43     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.24.2020 00:43     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.24.2020 00:43     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 8**  
Lab Sample Id: 678620-008

Matrix: Soil  
Date Collected: 11.16.2020 00:00

Date Received: 11.20.2020 14:19

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 00:56     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.23.2020 00:56     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.23.2020 00:56     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 9** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-009 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.34   | 4.99 | mg/kg | 11.21.2020 02:12 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.24.2020 01:05     |             |     |
| o-Terphenyl                        | 84-15-1           | 84                | %            | 70-130        | 11.24.2020 01:05     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 9**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-009

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 01:16     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 120               | %            | 70-130        | 11.23.2020 01:16     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.23.2020 01:16     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 10** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-010 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.23   | 4.95 | mg/kg | 11.21.2020 02:17 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.24.2020 01:27     |             |     |
| o-Terphenyl                        | 84-15-1           | 88                | %            | 70-130        | 11.24.2020 01:27     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 10**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-010

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3142980

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 01:36     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 01:36     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.23.2020 01:36     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 11** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-011 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.02   | 4.95 | mg/kg | 11.21.2020 02:23 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:12     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.24.2020 02:12     |             |     |
| o-Terphenyl                        | 84-15-1           | 99                | %            | 70-130        | 11.24.2020 02:12     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 11**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-011

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 01:57     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 119               | %            | 70-130        | 11.23.2020 01:57     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 01:57     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 12** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-012 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.54   | 4.95 | mg/kg | 11.21.2020 02:38 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 97                | %            | 70-130        | 11.24.2020 02:34     |             |     |
| o-Terphenyl                        | 84-15-1           | 92                | %            | 70-130        | 11.24.2020 02:34     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 12**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-012

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 02:17     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.23.2020 02:17     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 02:17     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 13** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-013 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 31.5   | 5.02 | mg/kg | 11.21.2020 02:44 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:56     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 99                | %            | 70-130        | 11.24.2020 02:56     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.24.2020 02:56     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 13**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-013

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 02:38     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 02:38     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.23.2020 02:38     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 14** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-014 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 347    | 5.00 | mg/kg | 11.21.2020 03:00 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 101               | %            | 70-130        | 11.24.2020 03:19     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.24.2020 03:19     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 14**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-014

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 02:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 02:58     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 108               | %            | 70-130        | 11.23.2020 02:58     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 15** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-015 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 13.6   | 5.00 | mg/kg | 11.21.2020 03:05 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:41     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 94                | %            | 70-130        | 11.24.2020 03:41     |             |     |
| o-Terphenyl                        | 84-15-1           | 88                | %            | 70-130        | 11.24.2020 03:41     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 15**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-015

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 03:19     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 102               | %            | 70-130        | 11.23.2020 03:19     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 63                | %            | 70-130        | 11.23.2020 03:19     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 16** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-016 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 9.00   | 5.00 | mg/kg | 11.21.2020 03:10 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:03     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 103               | %            | 70-130        | 11.24.2020 04:03     |             |     |
| o-Terphenyl                        | 84-15-1           | 96                | %            | 70-130        | 11.24.2020 04:03     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 16**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-016

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.21.2020 17:00

% Moisture:

Seq Number: 3142980

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 03:40     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.23.2020 03:40     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 109               | %            | 70-130        | 11.23.2020 03:40     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 17** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-017 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.33   | 4.96 | mg/kg | 11.21.2020 03:15 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:25     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 91                | %            | 70-130        | 11.24.2020 04:25     |             |     |
| o-Terphenyl                        | 84-15-1           | 82                | %            | 70-130        | 11.24.2020 04:25     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 17**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-017

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:

Seq Number: 3143039

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:09     | UXF         | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:09     | UX          | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:09     | UX          | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00396          | 0.00396      | mg/kg         | 11.23.2020 07:09     | UX          | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:09     | UX          | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 07:09     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 07:09     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 93                | %            | 70-130        | 11.23.2020 07:09     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.23.2020 07:09     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 18** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-018 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.06   | 4.98 | mg/kg | 11.21.2020 03:21 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:48     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.24.2020 04:48     |             |     |
| o-Terphenyl                        | 84-15-1           | 92                | %            | 70-130        | 11.24.2020 04:48     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 18**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-018

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 07:29     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.23.2020 07:29     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.23.2020 07:29     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 19** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-019 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.51   | 5.02 | mg/kg | 11.21.2020 03:26 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 05:10     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 100               | %            | 70-130        | 11.24.2020 05:10     |             |     |
| o-Terphenyl                        | 84-15-1           | 93                | %            | 70-130        | 11.24.2020 05:10     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 19**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-019

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 07:50     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.23.2020 07:50     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 100               | %            | 70-130        | 11.23.2020 07:50     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 20** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-020 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 17:00 % Moisture:  
 Seq Number: 3143028 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.86   | 5.00 | mg/kg | 11.21.2020 03:31 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143176 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | UF          | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 113               | %            | 70-130        | 11.24.2020 05:33     |             |     |
| o-Terphenyl                        | 84-15-1           | 109               | %            | 70-130        | 11.24.2020 05:33     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 20**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-020

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 08:11     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.23.2020 08:11     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 08:11     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 21** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-021 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.57   | 5.03 | mg/kg | 11.20.2020 22:15 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 21:23     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 103               | %            | 70-130        | 11.23.2020 21:23     |             |     |
| o-Terphenyl                        | 84-15-1           | 94                | %            | 70-130        | 11.23.2020 21:23     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 21**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-021

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 08:31     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 08:31     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 96                | %            | 70-130        | 11.23.2020 08:31     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 22** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-022 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 376    | 4.96 | mg/kg | 11.20.2020 22:30 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.23.2020 22:29     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 110               | %            | 70-130        | 11.23.2020 22:29     |             |     |
| o-Terphenyl                        | 84-15-1           | 106               | %            | 70-130        | 11.23.2020 22:29     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 22**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-022

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 08:52     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 08:52     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 91                | %            | 70-130        | 11.23.2020 08:52     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 23** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-023 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 13.9   | 4.98 | mg/kg | 11.20.2020 22:36 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 22:51     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 92                | %            | 70-130        | 11.23.2020 22:51     |             |     |
| o-Terphenyl                        | 84-15-1           | 83                | %            | 70-130        | 11.23.2020 22:51     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 23**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-023

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:

Seq Number: 3143039

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 09:13     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 107               | %            | 70-130        | 11.23.2020 09:13     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 09:13     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 24** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-024 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.36   | 5.04 | mg/kg | 11.20.2020 22:41 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 23:13     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 110               | %            | 70-130        | 11.23.2020 23:13     |             |     |
| o-Terphenyl                        | 84-15-1           | 101               | %            | 70-130        | 11.23.2020 23:13     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 24**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-024

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 09:33     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 09:33     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 09:33     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 25** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-025 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.96   | 4.95 | mg/kg | 11.20.2020 22:46 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 23:36     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.23.2020 23:36     |             |     |
| o-Terphenyl                        | 84-15-1           | 89                | %            | 70-130        | 11.23.2020 23:36     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 25**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-025

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 09:54     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.23.2020 09:54     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 116               | %            | 70-130        | 11.23.2020 09:54     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 26** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-026 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 14.0   | 5.05 | mg/kg | 11.20.2020 23:02 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 23:58     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 116               | %            | 70-130        | 11.23.2020 23:58     |             |     |
| o-Terphenyl                        | 84-15-1           | 111               | %            | 70-130        | 11.23.2020 23:58     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 26**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-026

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 10:14     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 10:14     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.23.2020 10:14     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 27** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-027 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.21   | 4.99 | mg/kg | 11.20.2020 23:07 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 00:20     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 101               | %            | 70-130        | 11.24.2020 00:20     |             |     |
| o-Terphenyl                        | 84-15-1           | 92                | %            | 70-130        | 11.24.2020 00:20     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 27**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-027

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 11:38     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 85                | %            | 70-130        | 11.23.2020 11:38     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.23.2020 11:38     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 28** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-028 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 40.8   | 5.05 | mg/kg | 11.20.2020 23:13 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 00:43     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 99                | %            | 70-130        | 11.24.2020 00:43     |             |     |
| o-Terphenyl                        | 84-15-1           | 90                | %            | 70-130        | 11.24.2020 00:43     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 28**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-028

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 11:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 11:58     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 109               | %            | 70-130        | 11.23.2020 11:58     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 29** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-029 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 104    | 4.96 | mg/kg | 11.20.2020 23:18 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 01:05     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 107               | %            | 70-130        | 11.24.2020 01:05     |             |     |
| o-Terphenyl                        | 84-15-1           | 102               | %            | 70-130        | 11.24.2020 01:05     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 29**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-029

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 12:19     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 12:19     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 12:19     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 30** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-030 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 13.4   | 5.02 | mg/kg | 11.20.2020 23:23 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 01:27     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 108               | %            | 70-130        | 11.24.2020 01:27     |             |     |
| o-Terphenyl                        | 84-15-1           | 105               | %            | 70-130        | 11.24.2020 01:27     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 30**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-030

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 12:39     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 12:39     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.23.2020 12:39     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 31** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-031 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 206    | 5.00 | mg/kg | 11.20.2020 23:28 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 02:12     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 106               | %            | 70-130        | 11.24.2020 02:12     |             |     |
| o-Terphenyl                        | 84-15-1           | 100               | %            | 70-130        | 11.24.2020 02:12     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 31**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-031

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:

Seq Number: 3143039

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 12:59     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 12:59     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 12:59     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 32** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-032 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 455    | 5.05 | mg/kg | 11.20.2020 23:44 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 02:34     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 110               | %            | 70-130        | 11.24.2020 02:34     |             |     |
| o-Terphenyl                        | 84-15-1           | 105               | %            | 70-130        | 11.24.2020 02:34     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 32**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-032

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 13:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 94                | %            | 70-130        | 11.23.2020 13:20     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 122               | %            | 70-130        | 11.23.2020 13:20     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 33** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-033 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 55.5   | 4.98 | mg/kg | 11.20.2020 23:49 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 02:56     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 102               | %            | 70-130        | 11.24.2020 02:56     |             |     |
| o-Terphenyl                        | 84-15-1           | 97                | %            | 70-130        | 11.24.2020 02:56     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 33**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-033

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 13:40     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 13:40     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 13:40     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 34** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-034 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 56.1   | 4.95 | mg/kg | 11.21.2020 00:05 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 03:19     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 108               | %            | 70-130        | 11.24.2020 03:19     |             |     |
| o-Terphenyl                        | 84-15-1           | 104               | %            | 70-130        | 11.24.2020 03:19     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 34**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-034

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:  
Basis: Wet Weight

Seq Number: 3143039

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 14:01     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.23.2020 14:01     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 98                | %            | 70-130        | 11.23.2020 14:01     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 35** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-035 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 12.4   | 5.04 | mg/kg | 11.21.2020 00:11 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 03:41     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 104               | %            | 70-130        | 11.24.2020 03:41     |             |     |
| o-Terphenyl                        | 84-15-1           | 95                | %            | 70-130        | 11.24.2020 03:41     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 35**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-035

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:

Seq Number: 3143039

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00401          | 0.00401      | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 14:21     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 120               | %            | 70-130        | 11.23.2020 14:21     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 92                | %            | 70-130        | 11.23.2020 14:21     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 36** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-036 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.01   | 4.95 | mg/kg | 11.21.2020 00:16 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 04:03     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 104               | %            | 70-130        | 11.24.2020 04:03     |             |     |
| o-Terphenyl                        | 84-15-1           | 95                | %            | 70-130        | 11.24.2020 04:03     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 36**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-036

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.22.2020 16:00

% Moisture:

Seq Number: 3143039

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 14:42     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 126               | %            | 70-130        | 11.23.2020 14:42     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 88                | %            | 70-130        | 11.23.2020 14:42     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 37** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-037 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 117    | 5.00 | mg/kg | 11.21.2020 00:21 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.24.2020 04:25     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 114               | %            | 70-130        | 11.24.2020 04:25     |             |     |
| o-Terphenyl                        | 84-15-1           | 112               | %            | 70-130        | 11.24.2020 04:25     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 37**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-037

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 18:58     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 89                | %            | 70-130        | 11.23.2020 18:58     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 90                | %            | 70-130        | 11.23.2020 18:58     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 38** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-038 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 56.6   | 5.03 | mg/kg | 11.21.2020 00:27 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 04:48     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 119               | %            | 70-130        | 11.24.2020 04:48     |             |     |
| o-Terphenyl                        | 84-15-1           | 118               | %            | 70-130        | 11.24.2020 04:48     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 38**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-038

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 19:19     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 112               | %            | 70-130        | 11.23.2020 19:19     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 19:19     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 39** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-039 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 9.70   | 5.00 | mg/kg | 11.21.2020 00:32 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.24.2020 05:10     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 104               | %            | 70-130        | 11.24.2020 05:10     |             |     |
| o-Terphenyl                        | 84-15-1           | 93                | %            | 70-130        | 11.24.2020 05:10     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 39**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-039

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.23.2020 19:39     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 124               | %            | 70-130        | 11.23.2020 19:39     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 91                | %            | 70-130        | 11.23.2020 19:39     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 40** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-040 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.20.2020 16:40 % Moisture:  
 Seq Number: 3143021 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.82   | 5.00 | mg/kg | 11.21.2020 00:37 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143177 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.24.2020 05:33     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 102               | %            | 70-130        | 11.24.2020 05:33     |             |     |
| o-Terphenyl                        | 84-15-1           | 92                | %            | 70-130        | 11.24.2020 05:33     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 40**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-040

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 20:00     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 106               | %            | 70-130        | 11.23.2020 20:00     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 86                | %            | 70-130        | 11.23.2020 20:00     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 41** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-041 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 8.91   | 5.00 | mg/kg | 11.21.2020 12:31 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 13:06     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 13:06     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 13:06     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 13:06     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.23.2020 13:06     |             |     |
| o-Terphenyl                        | 84-15-1           | 111               | %            | 70-130        | 11.23.2020 13:06     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 41**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-041

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 20:20     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 119               | %            | 70-130        | 11.23.2020 20:20     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 95                | %            | 70-130        | 11.23.2020 20:20     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 42** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-042 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.60   | 5.05 | mg/kg | 11.21.2020 12:47 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.23.2020 14:04     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.23.2020 14:04     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.23.2020 14:04     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.23.2020 14:04     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 97                | %            | 70-130        | 11.23.2020 14:04     |             |     |
| o-Terphenyl                        | 84-15-1           | 143               | %            | 70-130        | 11.23.2020 14:04     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 42**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-042

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:  
Basis: Wet Weight

Seq Number: 3143123

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 20:40     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 117               | %            | 70-130        | 11.23.2020 20:40     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 96                | %            | 70-130        | 11.23.2020 20:40     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 43** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-043 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.67   | 4.98 | mg/kg | 11.21.2020 12:52 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:24     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:24     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:24     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 14:24     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 93                | %            | 70-130        | 11.23.2020 14:24     |             |     |
| o-Terphenyl                        | 84-15-1           | 123               | %            | 70-130        | 11.23.2020 14:24     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 43**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-043

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.23.2020 21:01     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 89                | %            | 70-130        | 11.23.2020 21:01     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 123               | %            | 70-130        | 11.23.2020 21:01     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 44** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-044 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.20   | 5.00 | mg/kg | 11.21.2020 12:57 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:43     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:43     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 14:43     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 14:43     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 95                | %            | 70-130        | 11.23.2020 14:43     |             |     |
| o-Terphenyl                        | 84-15-1           | 143               | %            | 70-130        | 11.23.2020 14:43     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 44**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-044

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00400          | 0.00400      | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.23.2020 21:21     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.23.2020 21:21     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 21:21     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 45** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-045 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 6.50   | 4.99 | mg/kg | 11.21.2020 13:03 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:03     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:03     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:03     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 15:03     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 89                | %            | 70-130        | 11.23.2020 15:03     |             |     |
| o-Terphenyl                        | 84-15-1           | 135               | %            | 70-130        | 11.23.2020 15:03     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 45**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-045

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:  
Basis: Wet Weight

Seq Number: 3143123

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| Toluene              | 108-88-3          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00397          | 0.00397      | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00198          | 0.00198      | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| Total BTEX           |                   | <0.001980         | 0.001980     | mg/kg         | 11.23.2020 23:26     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 99                | %            | 70-130        | 11.23.2020 23:26     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 111               | %            | 70-130        | 11.23.2020 23:26     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 46** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-046 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 5.96   | 5.03 | mg/kg | 11.21.2020 13:18 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:22     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:22     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.9             | 49.9         | mg/kg         | 11.23.2020 15:22     | U           | 1   |
| Total TPH                          | PHC635            | <49.90            | 49.90        | mg/kg         | 11.23.2020 15:22     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 87                | %            | 70-130        | 11.23.2020 15:22     |             |     |
| o-Terphenyl                        | 84-15-1           | 129               | %            | 70-130        | 11.23.2020 15:22     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 46**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-046

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Toluene              | 108-88-3          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00402          | 0.00402      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00201          | 0.00201      | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| Total BTEX           |                   | <0.002010         | 0.002010     | mg/kg         | 11.23.2020 23:46     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 127               | %            | 70-130        | 11.23.2020 23:46     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 89                | %            | 70-130        | 11.23.2020 23:46     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 47** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-047 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.35   | 4.96 | mg/kg | 11.21.2020 13:24 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 15:42     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 15:42     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 15:42     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 15:42     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 97                | %            | 70-130        | 11.23.2020 15:42     |             |     |
| o-Terphenyl                        | 84-15-1           | 146               | %            | 70-130        | 11.23.2020 15:42     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 47**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-047

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| Toluene              | 108-88-3          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00403          | 0.00403      | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00202          | 0.00202      | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| Total BTEX           |                   | <0.002020         | 0.002020     | mg/kg         | 11.24.2020 00:06     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1,4-Difluorobenzene  | 540-36-3          | 88                | %            | 70-130        | 11.24.2020 00:06     |             |     |
| 4-Bromofluorobenzene | 460-00-4          | 118               | %            | 70-130        | 11.24.2020 00:06     |             |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 48** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-048 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.56   | 4.95 | mg/kg | 11.21.2020 13:29 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <49.8             | 49.8         | mg/kg         | 11.23.2020 16:01     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <49.8             | 49.8         | mg/kg         | 11.23.2020 16:01     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <49.8             | 49.8         | mg/kg         | 11.23.2020 16:01     | U           | 1   |
| Total TPH                          | PHC635            | <49.80            | 49.80        | mg/kg         | 11.23.2020 16:01     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 96                | %            | 70-130        | 11.23.2020 16:01     |             |     |
| o-Terphenyl                        | 84-15-1           | 144               | %            | 70-130        | 11.23.2020 16:01     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 48**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-048

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00199          | 0.00199      | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| Toluene              | 108-88-3          | <0.00199          | 0.00199      | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00199          | 0.00199      | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00398          | 0.00398      | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00199          | 0.00199      | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.001990         | 0.001990     | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| Total BTEX           |                   | <0.001990         | 0.001990     | mg/kg         | 11.24.2020 00:27     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 115               | %            | 70-130        | 11.24.2020 00:27     |             |     |
| 1,4-Difluorobenzene  | 540-36-3          | 97                | %            | 70-130        | 11.24.2020 00:27     |             |     |





# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 49** Matrix: Soil Date Received: 11.20.2020 14:19  
 Lab Sample Id: 678620-049 Date Collected: 11.16.2020 00:00  
 Analytical Method: Inorganic Anions by EPA 300/300.1 Prep Method: E300P  
 Tech: CHE  
 Analyst: CHE Date Prep: 11.21.2020 11:40 % Moisture:  
 Seq Number: 3143030 Basis: Wet Weight

| Parameter | Cas Number | Result | RL   | Units | Analysis Date    | Flag | Dil |
|-----------|------------|--------|------|-------|------------------|------|-----|
| Chloride  | 16887-00-6 | 7.68   | 5.04 | mg/kg | 11.21.2020 13:34 |      | 1   |

Analytical Method: TPH By SW8015 Mod Prep Method: SW8015P  
 Tech: DVM  
 Analyst: ARM Date Prep: 11.23.2020 10:00 % Moisture:  
 Seq Number: 3143174 Basis: Wet Weight

| Parameter                          | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|------------------------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Gasoline Range Hydrocarbons (GRO)  | PHC610            | <50.0             | 50.0         | mg/kg         | 11.23.2020 16:21     | U           | 1   |
| Diesel Range Organics (DRO)        | C10C28DRO         | <50.0             | 50.0         | mg/kg         | 11.23.2020 16:21     | U           | 1   |
| Motor Oil Range Hydrocarbons (MRO) | PHCG2835          | <50.0             | 50.0         | mg/kg         | 11.23.2020 16:21     | U           | 1   |
| Total TPH                          | PHC635            | <50.00            | 50.00        | mg/kg         | 11.23.2020 16:21     | U           | 1   |
| <b>Surrogate</b>                   | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 1-Chlorooctane                     | 111-85-3          | 98                | %            | 70-130        | 11.23.2020 16:21     |             |     |
| o-Terphenyl                        | 84-15-1           | 148               | %            | 70-130        | 11.23.2020 16:21     | **          |     |



# Certificate of Analytical Results 678620

## Tetra Tech- Midland, Midland, TX Caballo Riser

Sample Id: **Sidewall 49**

Matrix: Soil

Date Received: 11.20.2020 14:19

Lab Sample Id: 678620-049

Date Collected: 11.16.2020 00:00

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5035A

Tech: KTL

Analyst: KTL

Date Prep: 11.23.2020 14:15

% Moisture:

Seq Number: 3143123

Basis: Wet Weight

| Parameter            | Cas Number        | Result            | RL           | Units         | Analysis Date        | Flag        | Dil |
|----------------------|-------------------|-------------------|--------------|---------------|----------------------|-------------|-----|
| Benzene              | 71-43-2           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| Toluene              | 108-88-3          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| Ethylbenzene         | 100-41-4          | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| m,p-Xylenes          | 179601-23-1       | <0.00399          | 0.00399      | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| o-Xylene             | 95-47-6           | <0.00200          | 0.00200      | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| Total Xylenes        | 1330-20-7         | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| Total BTEX           |                   | <0.002000         | 0.002000     | mg/kg         | 11.24.2020 00:47     | U           | 1   |
| <b>Surrogate</b>     | <b>Cas Number</b> | <b>% Recovery</b> | <b>Units</b> | <b>Limits</b> | <b>Analysis Date</b> | <b>Flag</b> |     |
| 4-Bromofluorobenzene | 460-00-4          | 132               | %            | 70-130        | 11.24.2020 00:47     | **          |     |
| 1,4-Difluorobenzene  | 540-36-3          | 86                | %            | 70-130        | 11.24.2020 00:47     |             |     |

## Flagging Criteria

- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

\*\* Surrogate recovered outside laboratory control limit.

**BRL** Below Reporting Limit.      **ND** Not Detected.

**RL** Reporting Limit

**MDL** Method Detection Limit      **SDL** Sample Detection Limit      **LOD** Limit of Detection

**PQL** Practical Quantitation Limit      **MQL** Method Quantitation Limit      **LOQ** Limit of Quantitation

**DL** Method Detection Limit

**NC** Non-Calculable

**SMP** Client Sample      **BLK** Method Blank

**BKS/LCS** Blank Spike/Laboratory Control Sample      **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

**MD/SD** Method Duplicate/Sample Duplicate      **MS** Matrix Spike      **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

\* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



### Tetra Tech- Midland Caballo Riser

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143021

Matrix: Solid

Prep Method: E300P

Date Prep: 11.20.2020

MB Sample Id: 7715652-1-BLK

LCS Sample Id: 7715652-1-BKS

LCSD Sample Id: 7715652-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 257        | 103      | 258         | 103       | 90-110 | 0    | 20        | mg/kg | 11.20.2020 22:03 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143028

Matrix: Solid

Prep Method: E300P

Date Prep: 11.20.2020

MB Sample Id: 7715653-1-BLK

LCS Sample Id: 7715653-1-BKS

LCSD Sample Id: 7715653-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 256        | 102      | 259         | 104       | 90-110 | 1    | 20        | mg/kg | 11.21.2020 00:58 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143030

Matrix: Solid

Prep Method: E300P

Date Prep: 11.21.2020

MB Sample Id: 7715726-1-BLK

LCS Sample Id: 7715726-1-BKS

LCSD Sample Id: 7715726-1-BSD

| Parameter | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Chloride  | <5.00     | 250          | 254        | 102      | 254         | 102       | 90-110 | 0    | 20        | mg/kg | 11.21.2020 12:21 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143021

Matrix: Soil

Prep Method: E300P

Date Prep: 11.20.2020

Parent Sample Id: 678620-021

MS Sample Id: 678620-021 S

MSD Sample Id: 678620-021 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 8.57          | 252          | 266       | 102     | 267        | 103      | 90-110 | 0    | 20        | mg/kg | 11.20.2020 22:20 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143021

Matrix: Soil

Prep Method: E300P

Date Prep: 11.20.2020

Parent Sample Id: 678620-031

MS Sample Id: 678620-031 S

MSD Sample Id: 678620-031 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 206           | 250          | 465       | 104     | 472        | 106      | 90-110 | 1    | 20        | mg/kg | 11.20.2020 23:34 |      |

**Analytical Method: Inorganic Anions by EPA 300/300.1**

Seq Number: 3143028

Matrix: Soil

Prep Method: E300P

Date Prep: 11.20.2020

Parent Sample Id: 678620-001

MS Sample Id: 678620-001 S

MSD Sample Id: 678620-001 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 235           | 248          | 484       | 100     | 478        | 98       | 90-110 | 1    | 20        | mg/kg | 11.21.2020 01:14 |      |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



## Tetra Tech- Midland

Caballo Riser

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3143028

Matrix: Soil

Prep Method: E300P

Date Prep: 11.20.2020

Parent Sample Id: 678620-011

MS Sample Id: 678620-011 S

MSD Sample Id: 678620-011 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 8.02          | 248          | 264       | 103     | 264        | 103      | 90-110 | 0    | 20        | mg/kg | 11.21.2020 02:28 |      |

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3143030

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678617-002

MS Sample Id: 678617-002 S

MSD Sample Id: 678617-002 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 97.5          | 250          | 343       | 98      | 343        | 98       | 90-110 | 0    | 20        | mg/kg | 11.21.2020 13:50 |      |

## Analytical Method: Inorganic Anions by EPA 300/300.1

Seq Number: 3143030

Matrix: Soil

Prep Method: E300P

Date Prep: 11.21.2020

Parent Sample Id: 678620-041

MS Sample Id: 678620-041 S

MSD Sample Id: 678620-041 SD

| Parameter | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Chloride  | 8.91          | 250          | 260       | 100     | 259        | 100      | 90-110 | 0    | 20        | mg/kg | 11.21.2020 12:36 |      |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143174

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

MB Sample Id: 7715842-1-BLK

LCS Sample Id: 7715842-1-BKS

LCSD Sample Id: 7715842-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 919        | 92       | 885         | 89        | 70-130 | 4    | 20        | mg/kg | 11.23.2020 12:26 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 994        | 99       | 960         | 96        | 70-130 | 3    | 20        | mg/kg | 11.23.2020 12:26 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 93      |         | 127      |          | 114       |           | 70-130 | %     | 11.23.2020 12:26 |
| o-Terphenyl    | 100     |         | 129      |          | 98        |           | 70-130 | %     | 11.23.2020 12:26 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143176

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

MB Sample Id: 7715843-1-BLK

LCS Sample Id: 7715843-1-BKS

LCSD Sample Id: 7715843-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 1030       | 103      | 829         | 83        | 70-130 | 22   | 20        | mg/kg | 11.23.2020 20:38 | F    |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 1020       | 102      | 887         | 89        | 70-130 | 14   | 20        | mg/kg | 11.23.2020 20:38 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 104     |         | 115      |          | 96        |           | 70-130 | %     | 11.23.2020 20:38 |
| o-Terphenyl    | 102     |         | 119      |          | 99        |           | 70-130 | %     | 11.23.2020 20:38 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

[D] = 100\*(C-A) / B  
RPD = 200\* | (C-E) / (C+E) |  
[D] = 100 \* (C) / [B]  
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
A = Parent Result  
C = MS/LCS Result  
E = MSD/LCSD Result

MS = Matrix Spike  
B = Spike Added  
D = MSD/LCSD % Rec



## Tetra Tech- Midland

Caballo Riser

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143177

MB Sample Id: 7715844-1-BLK

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

LCS Sample Id: 7715844-1-BKS

LCSD Sample Id: 7715844-1-BSD

| Parameter                         | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <50.0     | 1000         | 1030       | 103      | 986         | 99        | 70-130 | 4    | 20        | mg/kg | 11.23.2020 20:38 |      |
| Diesel Range Organics (DRO)       | <50.0     | 1000         | 985        | 99       | 964         | 96        | 70-130 | 2    | 20        | mg/kg | 11.23.2020 20:38 |      |

| Surrogate      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1-Chlorooctane | 104     |         | 117      |          | 111       |           | 70-130 | %     | 11.23.2020 20:38 |
| o-Terphenyl    | 109     |         | 120      |          | 106       |           | 70-130 | %     | 11.23.2020 20:38 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143174

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

MB Sample Id: 7715842-1-BLK

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.23.2020 12:07 |      |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143176

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

MB Sample Id: 7715843-1-BLK

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.23.2020 20:16 |      |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143177

Matrix: Solid

Prep Method: SW8015P

Date Prep: 11.23.2020

MB Sample Id: 7715844-1-BLK

| Parameter                          | MB Result | Units | Analysis Date    | Flag |
|------------------------------------|-----------|-------|------------------|------|
| Motor Oil Range Hydrocarbons (MRO) | <50.0     | mg/kg | 11.23.2020 20:16 |      |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143174

Matrix: Soil

Prep Method: SW8015P

Date Prep: 11.23.2020

Parent Sample Id: 678620-041

MS Sample Id: 678620-041 S

MSD Sample Id: 678620-041 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 998          | 892       | 89      | 838        | 84       | 70-130 | 6    | 20        | mg/kg | 11.23.2020 13:25 |      |
| Diesel Range Organics (DRO)       | <49.9         | 998          | 905       | 91      | 903        | 91       | 70-130 | 0    | 20        | mg/kg | 11.23.2020 13:25 |      |

| Surrogate      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 104     |         | 104      |          | 70-130 | %     | 11.23.2020 13:25 |
| o-Terphenyl    | 123     |         | 120      |          | 70-130 | %     | 11.23.2020 13:25 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

## Tetra Tech- Midland

Caballo Riser

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143176

Parent Sample Id: 678620-001

Matrix: Soil

MS Sample Id: 678620-001 S

Prep Method: SW8015P

Date Prep: 11.23.2020

MSD Sample Id: 678620-001 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 998          | 990       | 99      | 857        | 86       | 70-130 | 14   | 20        | mg/kg | 11.23.2020 21:45 |      |
| Diesel Range Organics (DRO)       | <49.9         | 998          | 904       | 91      | 914        | 92       | 70-130 | 1    | 20        | mg/kg | 11.23.2020 21:45 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 82      |         | 85       |          | 70-130 | %     | 11.23.2020 21:45 |
| o-Terphenyl    | 79      |         | 78       |          | 70-130 | %     | 11.23.2020 21:45 |

## Analytical Method: TPH By SW8015 Mod

Seq Number: 3143177

Parent Sample Id: 678620-021

Matrix: Soil

MS Sample Id: 678620-021 S

Prep Method: SW8015P

Date Prep: 11.23.2020

MSD Sample Id: 678620-021 SD

| Parameter                         | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|-----------------------------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Gasoline Range Hydrocarbons (GRO) | <49.9         | 997          | 944       | 95      | 983        | 98       | 70-130 | 4    | 20        | mg/kg | 11.23.2020 21:45 |      |
| Diesel Range Organics (DRO)       | <49.9         | 997          | 956       | 96      | 952        | 95       | 70-130 | 0    | 20        | mg/kg | 11.23.2020 21:45 |      |

## Surrogate

|                | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------|---------|---------|----------|----------|--------|-------|------------------|
| 1-Chlorooctane | 100     |         | 99       |          | 70-130 | %     | 11.23.2020 21:45 |
| o-Terphenyl    | 91      |         | 88       |          | 70-130 | %     | 11.23.2020 21:45 |

## Analytical Method: BTEX by EPA 8021B

Seq Number: 3142980

MB Sample Id: 7715740-1-BLK

Matrix: Solid

LCS Sample Id: 7715740-1-BKS

Prep Method: SW5035A

Date Prep: 11.21.2020

LCSD Sample Id: 7715740-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0881     | 88       | 0.0850      | 85        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |
| Toluene      | <0.00200  | 0.100        | 0.0892     | 89       | 0.0859      | 86        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0961     | 96       | 0.0934      | 93        | 70-130 | 3    | 35        | mg/kg | 11.22.2020 17:49 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.190      | 95       | 0.188       | 94        | 70-130 | 1    | 35        | mg/kg | 11.22.2020 17:49 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0945     | 95       | 0.0911      | 91        | 70-130 | 4    | 35        | mg/kg | 11.22.2020 17:49 |      |

## Surrogate

|                      | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 94      |         | 97       |          | 97        |           | 70-130 | %     | 11.22.2020 17:49 |
| 4-Bromofluorobenzene | 121     |         | 104      |          | 108       |           | 70-130 | %     | 11.22.2020 17:49 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec



### Tetra Tech- Midland Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143039

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.22.2020

MB Sample Id: 7715781-1-BLK

LCS Sample Id: 7715781-1-BKS

LCSD Sample Id: 7715781-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0897     | 90       | 0.0815      | 82        | 70-130 | 10   | 35        | mg/kg | 11.23.2020 04:44 |      |
| Toluene      | <0.00200  | 0.100        | 0.0862     | 86       | 0.0784      | 78        | 70-130 | 9    | 35        | mg/kg | 11.23.2020 04:44 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0906     | 91       | 0.0825      | 83        | 70-130 | 9    | 35        | mg/kg | 11.23.2020 04:44 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.175      | 88       | 0.160       | 80        | 70-130 | 9    | 35        | mg/kg | 11.23.2020 04:44 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0882     | 88       | 0.0805      | 81        | 70-130 | 9    | 35        | mg/kg | 11.23.2020 04:44 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 97      |         | 101      |          | 100       |           | 70-130 | %     | 11.23.2020 04:44 |
| 4-Bromofluorobenzene | 100     |         | 102      |          | 101       |           | 70-130 | %     | 11.23.2020 04:44 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143123

Matrix: Solid

Prep Method: SW5035A

Date Prep: 11.23.2020

MB Sample Id: 7715846-1-BLK

LCS Sample Id: 7715846-1-BKS

LCSD Sample Id: 7715846-1-BSD

| Parameter    | MB Result | Spike Amount | LCS Result | LCS %Rec | LCSD Result | LCSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|-----------|--------------|------------|----------|-------------|-----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200  | 0.100        | 0.0886     | 89       | 0.0852      | 85        | 70-130 | 4    | 35        | mg/kg | 11.23.2020 16:36 |      |
| Toluene      | <0.00200  | 0.100        | 0.0854     | 85       | 0.0823      | 82        | 70-130 | 4    | 35        | mg/kg | 11.23.2020 16:36 |      |
| Ethylbenzene | <0.00200  | 0.100        | 0.0897     | 90       | 0.0870      | 87        | 70-130 | 3    | 35        | mg/kg | 11.23.2020 16:36 |      |
| m,p-Xylenes  | <0.00400  | 0.200        | 0.176      | 88       | 0.171       | 86        | 70-130 | 3    | 35        | mg/kg | 11.23.2020 16:36 |      |
| o-Xylene     | <0.00200  | 0.100        | 0.0890     | 89       | 0.0863      | 86        | 70-130 | 3    | 35        | mg/kg | 11.23.2020 16:36 |      |

| Surrogate            | MB %Rec | MB Flag | LCS %Rec | LCS Flag | LCSD %Rec | LCSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|-----------|-----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 96      |         | 101      |          | 99        |           | 70-130 | %     | 11.23.2020 16:36 |
| 4-Bromofluorobenzene | 105     |         | 102      |          | 98        |           | 70-130 | %     | 11.23.2020 16:36 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3142980

Matrix: Soil

Prep Method: SW5035A

Date Prep: 11.21.2020

Parent Sample Id: 678618-013

MS Sample Id: 678618-013 S

MSD Sample Id: 678618-013 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00202      | 0.101        | 0.0228    | 23      | 0.0419     | 41       | 70-130 | 59   | 35        | mg/kg | 11.22.2020 18:29 | XF   |
| Toluene      | <0.00202      | 0.101        | 0.0160    | 16      | 0.0209     | 21       | 70-130 | 27   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| Ethylbenzene | <0.00202      | 0.101        | 0.0278    | 28      | 0.0349     | 35       | 70-130 | 23   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| m,p-Xylenes  | <0.00404      | 0.202        | 0.0453    | 22      | 0.0549     | 27       | 70-130 | 19   | 35        | mg/kg | 11.22.2020 18:29 | X    |
| o-Xylene     | <0.00202      | 0.101        | 0.0427    | 42      | 0.0520     | 51       | 70-130 | 20   | 35        | mg/kg | 11.22.2020 18:29 | X    |

| Surrogate            | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 89      |         | 97       |          | 70-130 | %     | 11.22.2020 18:29 |
| 4-Bromofluorobenzene | 131     | **      | 112      |          | 70-130 | %     | 11.22.2020 18:29 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec





## Tetra Tech- Midland

### Caballo Riser

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143039

Parent Sample Id: 678620-017

Matrix: Soil

MS Sample Id: 678620-017 S

Prep Method: SW5035A

Date Prep: 11.22.2020

MSD Sample Id: 678620-017 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00198      | 0.0990       | 0.0372    | 38      | 0.0534     | 54       | 70-130 | 36   | 35        | mg/kg | 11.23.2020 05:25 | XF   |
| Toluene      | <0.00198      | 0.0990       | 0.0282    | 28      | 0.0331     | 33       | 70-130 | 16   | 35        | mg/kg | 11.23.2020 05:25 | X    |
| Ethylbenzene | <0.00198      | 0.0990       | 0.0336    | 34      | 0.0431     | 44       | 70-130 | 25   | 35        | mg/kg | 11.23.2020 05:25 | X    |
| m,p-Xylenes  | <0.00396      | 0.198        | 0.0620    | 31      | 0.0767     | 39       | 70-130 | 21   | 35        | mg/kg | 11.23.2020 05:25 | X    |
| o-Xylene     | <0.00198      | 0.0990       | 0.0391    | 39      | 0.0530     | 54       | 70-130 | 30   | 35        | mg/kg | 11.23.2020 05:25 | X    |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 98      |         | 101      |          | 70-130 | %     | 11.23.2020 05:25 |
| 4-Bromofluorobenzene | 105     |         | 104      |          | 70-130 | %     | 11.23.2020 05:25 |

**Analytical Method: BTEX by EPA 8021B**

Seq Number: 3143123

Parent Sample Id: 678620-037

Matrix: Soil

MS Sample Id: 678620-037 S

Prep Method: SW5035A

Date Prep: 11.23.2020

MSD Sample Id: 678620-037 SD

| Parameter    | Parent Result | Spike Amount | MS Result | MS %Rec | MSD Result | MSD %Rec | Limits | %RPD | RPD Limit | Units | Analysis Date    | Flag |
|--------------|---------------|--------------|-----------|---------|------------|----------|--------|------|-----------|-------|------------------|------|
| Benzene      | <0.00200      | 0.0998       | 0.0750    | 75      | 0.0805     | 81       | 70-130 | 7    | 35        | mg/kg | 11.23.2020 17:17 |      |
| Toluene      | <0.00200      | 0.0998       | 0.0815    | 82      | 0.0793     | 79       | 70-130 | 3    | 35        | mg/kg | 11.23.2020 17:17 |      |
| Ethylbenzene | <0.00200      | 0.0998       | 0.0935    | 94      | 0.0853     | 85       | 70-130 | 9    | 35        | mg/kg | 11.23.2020 17:17 |      |
| m,p-Xylenes  | <0.00399      | 0.200        | 0.192     | 96      | 0.171      | 86       | 70-130 | 12   | 35        | mg/kg | 11.23.2020 17:17 |      |
| o-Xylene     | <0.00200      | 0.0998       | 0.0956    | 96      | 0.0854     | 85       | 70-130 | 11   | 35        | mg/kg | 11.23.2020 17:17 |      |

**Surrogate**

|                      | MS %Rec | MS Flag | MSD %Rec | MSD Flag | Limits | Units | Analysis Date    |
|----------------------|---------|---------|----------|----------|--------|-------|------------------|
| 1,4-Difluorobenzene  | 89      |         | 100      |          | 70-130 | %     | 11.23.2020 17:17 |
| 4-Bromofluorobenzene | 120     |         | 107      |          | 70-130 | %     | 11.23.2020 17:17 |

MS/MSD Percent Recovery  
Relative Percent Difference  
LCS/LCSD Recovery  
Log Difference

$[D] = 100 * (C - A) / B$   
 $RPD = 200 * |(C - E) / (C + E)|$   
 $[D] = 100 * (C) / [B]$   
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample  
 A = Parent Result  
 C = MS/LCS Result  
 E = MSD/LCSD Result

MS = Matrix Spike  
 B = Spike Added  
 D = MSD/LCSD % Rec

## Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

 901W Wall Street, Ste 100  
 Midland, Texas 79705  
 Tel (432) 682-4559  
 Fax (432) 682-3946

678620

Page

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5

|                                |  |                                    |  |
|--------------------------------|--|------------------------------------|--|
| Client Name: EOG               |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser    |  |                                    |  |
| Project Location: Lea Co, NM   |  | Project #: 212C-MD-02256           |  |
| Invoice to: EOG - Galan Kelley |  |                                    |  |
| Receiving Laboratory: Xenco    |  | Sampler Signature: Conner Moehring |  |
| Comments:                      |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |           | # CONTAINERS | FILTERED (Y/N) |
|-------------------------|-----------------------|------------|------|--------|------|---------------------|------------------|-----|------|-----------|--------------|----------------|
|                         |                       | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |           |              |                |
|                         |                       |            |      |        |      |                     |                  |     |      | YEAR 2020 |              |                |
|                         | Sidewall 1            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 2            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 3            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 4            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 5            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 6            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 7            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 8            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 9            | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |
|                         | Sidewall 10           | 11/16/2020 |      | X      |      |                     |                  | X   |      |           | 1            | N              |

| LAB USE ONLY       |                                                                      | REMARKS: |
|--------------------|----------------------------------------------------------------------|----------|
| Sample Temperature | STANDARD                                                             |          |
| 20/2.5             | <input checked="" type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr |          |
|                    | <input type="checkbox"/> Rush Charges Authorized                     |          |
|                    | <input type="checkbox"/> Special Report Limits or TRRP Report        |          |

|                         |       |     |             |
|-------------------------|-------|-----|-------------|
| (Circle) HAND DELIVERED | FEDEX | UPS | Tracking #: |
|-------------------------|-------|-----|-------------|

 ANALYSIS REQUEST  
 (Circle or Specify Method No.)

 BTEX 8021B BTEX 8260B  
 TPH TX1005 (Ext to C35)  
 TPH 8015M ( GRO - DRO - ORO - MRO)  
 PAH 8270C  
 Total Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Metals Ag As Ba Cd Cr Pb Se Hg  
 TCLP Volatiles  
 TCLP Semi Volatiles  
 RCI  
 GC/MS Vol. 8260B / 624  
 GC/MS Semi. Vol. 8270C/625  
 PCB's 8082 / 608  
 NORM  
 PLM (Asbestos)  
 Chloride  
 Chloride Sulfate TDS  
 General Water Chemistry (see attached list)  
 Anion/Cation Balance

Hold

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Analysis Request of Chain of Custody Record



**Tetra Tech, Inc.**

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Client Name: EOG Site Manager: Mike Carmona

Project Name: Caballo Riser

Project Location: Lea Co., NM Project #: 212C-MD-02256

Invoice to: EOG - Galan Kelley

Receiving Laboratory: Xenco Sampler Signature: Conner Moehring

Comments:

D: 8/11/2024 3:24:51 PM

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING       |       | MATRIX       |          | PRESERVATIVE METHOD |                  |     |      | # CONTAINERS | FILTERED (Y/N) |
|-------------------------|-----------------------|----------------|-------|--------------|----------|---------------------|------------------|-----|------|--------------|----------------|
|                         |                       | YEAR: 2020     |       | WATER        | SOIL     | HCL                 | HNO <sub>3</sub> | ICE | None |              |                |
|                         |                       | DATE           | TIME  |              |          |                     |                  |     |      |              |                |
|                         | Sidewall 11           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 12           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 13           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 14           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 15           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 16           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 17           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 18           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 19           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
|                         | Sidewall 20           | 11/16/2020     |       | X            |          |                     | X                |     |      | 1 N          |                |
| Relinquished by:        | Conner Moehring       | Date: 11/20/20 | Time: | Received by: | Moehring | Date:               | Time:            |     |      |              |                |
| Relinquished by:        |                       | Date:          | Time: | Received by: |          | Date:               | Time:            |     |      |              |                |
| Relinquished by:        |                       | Date:          | Time: | Received by: |          | Date:               | Time:            |     |      |              |                |

ANALYSIS REQUEST

(Circle or Specify Method No.)

BTX 8021B BTX 8260B  
TPH TX1005 (Ext to C35)  
TPH 8015M ( GRO - DRO - ORO - MRO)  
PAH 8270C  
Total Metals Ag As Ba Cd Cr Pb Se Hg  
TCLP Metals Ag As Ba Cd Cr Pb Se Hg  
TCLP Volatiles  
TCLP Semi Volatiles  
RCI  
GC/MS Vol. 8260B / 624  
GC/MS Semi. Vol. 8270C/625  
PCB's 8082 / 608  
NORM  
PLM (Asbestos)  
Chloride  
Chloride Sulfate TDS  
General Water Chemistry (see attached list)  
Anion/Cation Balance

Hold

LAB USE ONLY

REMARKS:

STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

(Circle) HAND DELIVERED FEDEX UPS Tracking #:

2.0/2.5

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## Analysis Request of Custody Record



Tetra Tech, Inc.

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|                                |  |                                    |  |
|--------------------------------|--|------------------------------------|--|
| Client Name: EOG               |  | Site Manager: Mike Carmona         |  |
| Project Name: Caballo Riser    |  |                                    |  |
| Project Location: Lea Co, NM   |  | Project #: 212C-MD-02256           |  |
| Invoice to: EOG - Galan Kelley |  |                                    |  |
| Receiving Laboratory: Xenco    |  | Sampler Signature: Conner Moehring |  |
| Comments:                      |  |                                    |  |

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      | # CONTAINERS | FILTERED (Y/N) |            |
|-------------------------|-----------------------|------------|------|--------|------|---------------------|------------------|-----|------|--------------|----------------|------------|
|                         |                       | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None |              |                |            |
|                         |                       |            |      |        |      |                     |                  |     |      |              |                | YEAR: 2020 |
|                         | Sidewall 21           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 22           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 23           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 24           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 25           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 26           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 27           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 28           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 29           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |
|                         | Sidewall 30           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            |            |

| LAB USE ONLY | REMARKS: | ANALYSIS REQUEST<br>(Circle or Specify Method No.) |            |  |  |  |  |  |  |  |  |  |  |
|--------------|----------|----------------------------------------------------|------------|--|--|--|--|--|--|--|--|--|--|
|              |          |                                                    |            |  |  |  |  |  |  |  |  |  |  |
|              |          | BTEX 8021B                                         | BTEX 8260B |  |  |  |  |  |  |  |  |  |  |
|              |          | TPH TX1005 (Ext to C35)                            |            |  |  |  |  |  |  |  |  |  |  |
|              |          | TPH 8015M ( GRO - DRO - ORO - MRO)                 |            |  |  |  |  |  |  |  |  |  |  |
|              |          | PAH 8270C                                          |            |  |  |  |  |  |  |  |  |  |  |
|              |          | Total Metals Ag As Ba Cd Cr Pb Se Hg               |            |  |  |  |  |  |  |  |  |  |  |
|              |          | TCLP Metals Ag As Ba Cd Cr Pb Se Hg                |            |  |  |  |  |  |  |  |  |  |  |
|              |          | TCLP Volatiles                                     |            |  |  |  |  |  |  |  |  |  |  |
|              |          | TCLP Semi Volatiles                                |            |  |  |  |  |  |  |  |  |  |  |
|              |          | RCI                                                |            |  |  |  |  |  |  |  |  |  |  |
|              |          | GC/MS Vol. 8260B / 624                             |            |  |  |  |  |  |  |  |  |  |  |
|              |          | GC/MS Semi. Vol. 8270C/625                         |            |  |  |  |  |  |  |  |  |  |  |
|              |          | PCB's 8082 / 608                                   |            |  |  |  |  |  |  |  |  |  |  |
|              |          | NORM                                               |            |  |  |  |  |  |  |  |  |  |  |
|              |          | PLM (Asbestos)                                     |            |  |  |  |  |  |  |  |  |  |  |
|              |          | Chloride                                           |            |  |  |  |  |  |  |  |  |  |  |
|              |          | Chloride Sulfate TDS                               |            |  |  |  |  |  |  |  |  |  |  |
|              |          | General Water Chemistry (see attached list)        |            |  |  |  |  |  |  |  |  |  |  |
|              |          | Anion/Cation Balance                               |            |  |  |  |  |  |  |  |  |  |  |
|              |          | Hold                                               |            |  |  |  |  |  |  |  |  |  |  |

|                                                                             |                                                             |
|-----------------------------------------------------------------------------|-------------------------------------------------------------|
| Relinquished by: <i>Conner Moehring</i> 11/20/20<br>Date: 11/20/20<br>Time: | Received by: <i>Mike Carmona</i><br>Date: 11/20/20<br>Time: |
| Relinquished by: _____<br>Date: _____<br>Time: _____                        | Received by: _____<br>Date: _____<br>Time: _____            |

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(Circle) HAND DELIVERED FEDEX UPS Tracking #:

 REMARKS:  
☐ STANDARD  
☒ RUSH: Same Day 24 hr 48 hr 72 hr  
☐ Rush Charges Authorized  
☐ Special Report Limits or TRRP Report

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Analysis Request of Chain of Custody Record



Tetra Tech, Inc.

901W Wall Street, Ste 100  
Midland, Texas 79705  
Tel (432) 682-4559  
Fax (432) 682-3946

Client Name: EOG Site Manager: Mike Carmona

Project Name: Caballo Riser

Project Location: Lea Co, NM

Project #: 212C-MD-02256

Invoice to:

EOG - Galan Kelley

Receiving Laboratory:

Xenco

Sampler Signature:

Conner Moehring

Comments:

| LAB #<br>(LAB USE ONLY) | SAMPLE IDENTIFICATION | SAMPLING   |      | MATRIX |      | PRESERVATIVE METHOD |                  |     |      |              |                |   |            |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|                         |                       | DATE       | TIME | WATER  | SOIL | HCL                 | HNO <sub>3</sub> | ICE | None | # CONTAINERS | FILTERED (Y/N) |   |            |     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|                         | Sidewall 41           | 11/16/2020 |      | X      |      |                     |                  | X   |      |              | 1 N            | X | BTEX 8021B | BTE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Reinquired by: *Conner Moehring* Date: 11/20/20 Received by: *Mike Carmona* Date: 11/20/20

Reinquired by: Date: Time: Received by: Date: Time:

Reinquired by: Date: Time: Received by: Date: Time:

Reinquired by: Date: Time: Received by: Date: Time:

ORIGINAL COPY

(Circle) HAND DELIVERED FEDEX UPS Tracking#:

LAB USE ONLY

Sample Temperature

20/25

REMARKS:

☐ STANDARD

☒ RUSH: Same Day 24 hr 48 hr 72 hr

☐ Rush Charges Authorized

☐ Special Report Limits or TRRP Report

# Eurofins Xenco, LLC

## Prelogin/Nonconformance Report- Sample Log-In

Client: Tetra Tech- Midland

Date/ Time Received: 11.20.2020 02.20.00 PM

Work Order #: 678620

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : IR-8

| Sample Receipt Checklist                                | Comments |
|---------------------------------------------------------|----------|
| #1 *Temperature of cooler(s)?                           | 2.5      |
| #2 *Shipping container in good condition?               | Yes      |
| #3 *Samples received on ice?                            | Yes      |
| #4 *Custody Seals intact on shipping container/ cooler? | N/A      |
| #5 Custody Seals intact on sample bottles?              | N/A      |
| #6 *Custody Seals Signed and dated?                     | N/A      |
| #7 *Chain of Custody present?                           | Yes      |
| #8 Any missing/extra samples?                           | No       |
| #9 Chain of Custody signed when relinquished/ received? | Yes      |
| #10 Chain of Custody agrees with sample labels/matrix?  | Yes      |
| #11 Container label(s) legible and intact?              | Yes      |
| #12 Samples in proper container/ bottle?                | Yes      |
| #13 Samples properly preserved?                         | Yes      |
| #14 Sample container(s) intact?                         | Yes      |
| #15 Sufficient sample amount for indicated test(s)?     | Yes      |
| #16 All samples received within hold time?              | Yes      |
| #17 Subcontract of sample(s)?                           | N/A      |
| #18 Water VOC samples have zero headspace?              | N/A      |

**\* Must be completed for after-hours delivery of samples prior to placing in the refrigerator**

Analyst:

PH Device/Lot#:

Checklist completed by:



Brianna Teel

Date: 11.20.2020

Checklist reviewed by:



Jessica Kramer

Date: 11.20.2020

**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 41468

**CONDITIONS**

|                                                                      |                                                           |
|----------------------------------------------------------------------|-----------------------------------------------------------|
| Operator:<br>EOG RESOURCES INC<br>P.O. Box 2267<br>Midland, TX 79702 | OGRID:<br>7377                                            |
|                                                                      | Action Number:<br>41468                                   |
|                                                                      | Action Type:<br>[C-141] Release Corrective Action (C-141) |

**CONDITIONS**

|            |           |                |
|------------|-----------|----------------|
| Created By | Condition | Condition Date |
| chensley   | None      | 9/2/2021       |