



Attn: New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, NM 87505

RE: **Release Investigation and Closure Report**  
Chaves 6" and 10" Steel Line  
Unit N, Section 12, Township 15 South, Range 29 East  
33.0248282°, -103.9845827°  
Chaves County, New Mexico  
Terracon Project No. KH237024

To Whom It May Concern:

Terracon Consultants, Inc. (Terracon) is pleased to submit our Release Investigation and Closure Report for the site referenced above. The scope of services was developed in accordance with the New Mexico Oil Conservation Division (NMOCD) regulations concerning clean-up actions required for releases of crude oil and produced water. The investigative response actions were taken as the result of a natural gas and condensate release from a suspected corroded lateral line. The below sections detail Terracon's assessment and remediation actions in response to the noted release.

### Action Items

#### Completed Actions

- 1) Initial site assessment and sampling events completed.
- 2) All Maps and associated data for approval have been provided
- 3) Soil samples collected were submitted to an approved analytical laboratory to determine levels of impact vertically and horizontally.
- 4) Excavation of the inferred release area was completed with the intent to remove impacted soil as determined by the Closure Criteria set by NMOCD.
- 5) All soil stockpiles on site were placed on plastic and bermed around the edges to reduce loss.
- 6) All confirmation samples were collected every 200 sq. ft.
- 7) Remedial activities were terminated when confirmation samples were collected below the NMOCD Remediation Action Levels (RALs) for Oil and Gas impacted soils.
- 8) All conditions needed for approval of closure have been met.

**Frontier Field Services, LLC**

Chaves 6" Steel Line

33.0248282°, -103.9845827°

NMOCD Reference # nAPP2301231426

Terracon Project # KH237024



**Anticipated Actions**

- 
- 1) Following the collection of confirmation samples, the excavation has been backfilled and brought to the surrounding grade, and reseeded.
  - 2) Approval by the NMOCD.
- 

Terracon appreciates this opportunity to provide environmental services to Frontier Field Services, LLC (Durango). Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

**Terracon Consultants, Inc.**

A handwritten signature in black ink, appearing to read 'Travis Casey', is written over the printed name.

**Travis Casey**

Senior Staff Scientist  
Carlsbad

A handwritten signature in blue ink, appearing to read 'Erin Loyd', is written over the printed name.

**Erin Loyd, P.G. (TX)**

Senior Principal  
Office Manager – Lubbock

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**Attachments:**

**Appendix A – Exhibits**

- Exhibit 1 – Topographic Map
- Exhibit 2 – Site Map
- Exhibit 3 – Site Sample Map
- Exhibit 4 – NMOSE POD Location Map
- Exhibit 5 – Designated Wetland Map
- Exhibit 6 – Cave Karst Public UCP Map

**Appendix B – Tables and Well Data**

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**Appendix D – Analytical Report and Chain of Custody**

**Appendix E – Initial Form C-141 and Final Form C-141**

**Appendix F – Terracon Standard of Care, Limitation, and**

**Reliance**

**Frontier Field Services, LLC**

Chaves 6" Steel Line

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NMOCD Reference # nAPP2301231426

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**Section 1 – Incident Information**

The following table provides detailed information regarding the January 10, 2023, natural gas, and condensate release at the Chaves 6" Steel Line (Chaves 6") site in Chaves County, New Mexico:

| Required Information         | Site and Release information  |  |
|------------------------------|---|--|
| Responsible party            | The pipeline is operated by Frontier Field Services, LLC.   |  |
| Local contact                | Contact: Mr. Guadalupe Carrasco   | P: (575)-703-1804<br>E: <a href="mailto:gcarrasco@durangomidstream.com">gcarrasco@durangomidstream.com</a> |
| NMOCD Notification           | Notice of the release was provided to the NMOCD District 2 Artesia Office by Ms. Amber Groves on January 12, 2023.<br>NMOCD Reference ID: nAPP2301231426  |  |
| Facility Description         | Chaves 6" & 10" is in Chaves County, New Mexico. It is an area located within Unit N, Section 12, Township 15 South, Range 29 East, approximately 23.92 miles northeast of Artesia, New Mexico. The site is predominantly developed oil and gas Right of Way (ROW), Bureau of Land Management (BLM) owned native pastureland. |  |
| Time of incident             | January 10, 2023, discovered during routine maintenance.  |  |
| Discharge event              | The natural gas pipeline leak was caused by external and internal corrosion. The Site is illustrated in Exhibits 1 and 2 of Appendix A  |  |
| Type of discharge            | The documented natural gas release occurred in a ROW, BLM-owned, native pastureland area. Soils at the site are affected at the surface and beyond the depth of the pipeline.   |  |
| Quantity of spilled material | Total Fluids: 4 bbls  | Natural Gas: 288.99 Mcf  |
| Site characteristics         | Relatively flat with drainage following the natural ground surface; very gently sloping to the north.   |  |
| Immediate corrective actions | The leaking pipeline was closed in at the nearest isolation valve, blown down, and clamped. A backhoe was utilized to excavate impacted soils around the line to discover the source of the release.  |  |



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## Section 2 – General Site Characteristics

| Physical Characteristic  | Site Ranking Characteristics   |
|--|--|
| <b>Groundwater</b><br>NMOSE POD Location Map – (Exhibit 6 in Appendix A)               | <p>POD Number: (L-14514 POD 1)</p> <p><u>Depth to Groundwater</u>: 77 ft. bgs</p> <p><u>Distance to Well</u>: 3.06 miles to the southeast</p> <p><u>Date Drilled</u>: August 09, 2018</p> <p><u>Groundwater Quality</u>: Groundwater quality at the site is predominately used for agricultural reasons.</p>   |
| <b>Surface Water</b><br>NM Wetland Map – (Exhibit 7 in Appendix A)                     | <p>Freshwater Pond (unnamed), is approximately 1.23 miles to the southwest.</p>  |
| <b>100-Year Flood Plain</b>  | <p>This site is located outside the 100-year flood plain of the Pecos River.</p>   |
| <b>Soil Characteristics</b>  | <p>Soils at the site are mapped as Faskin-Roswell Complex Sand series soils, 0 to 3 percent slopes, well-drained, 8 to 15 inches single-grained; many fine roots; very porous; neutral; gradual smooth boundary. (15 to 23 inches thick). The formation is categorized with a medium runoff classification.</p>  |
| <b>Karst Characterization</b><br>Cave Karst Public UCP Map – (Exhibit 8 in Appendix A) | <p>Terracon evaluated data from the NMOCD Public UCP Site, Karst map designations in reference to the site location. The site appears to be within a low-level Karst risk area. Based on on-site observations within the extent of the release margins, the potential for Karst formations in this specific area are of low potential, as illustrated in Exhibit 6. Restrictive features were not encountered from surface to 60 inches below grade surface (bgs) within the release margins. The full extent of release quantities and excavation activities did not extend greater than 60 inches bgs.</p> |

**Frontier Field Services, LLC**

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### Section 3 – Regulatory Framework and Response Action Levels

Oil and gas exploration and production facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). The NMOCD has issued the *Closure Criteria for Soils Impacted by a Release, June 21, 2018*, and *Restoration, Reclamation, and Re-vegetation (19.15.29.13) NMAC – D (Reclamation of areas no longer in use)* as guidance documents for the remediation and reclamation of sites impacted by releases from oil and gas exploration and production activities. Sections detailed below the applicability of these guidance documents to the site-specific characteristics associated with the Chaves 6".

#### Section 3.1 – Reclamation Levels (Surface to 4 ft. bgs)

The below Reclamation Limits for chlorides, TPH (GRO+DRO+MRO), BTEX (includes benzene, toluene, ethylbenzene, and xylenes), and benzene are defined within the New Mexico Administration Code (NMAC) *Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use)* for soils extending to 4 ft. bgs.:

| Constituent          | Remediation Limits |
|----------------------|--------------------|
| Chloride             | 600 mg/kg          |
| TPH<br>(GRO+DRO+MRO) | 100 mg/kg          |
| BTEX                 | 50 mg/kg           |
| Benzene              | 10 mg/kg           |

#### Section 3.2 – Remediation Levels (> 4 ft. bgs)

Based on the site-specific characteristics, and the informed depth to groundwater, the applicable NMOCD remediation levels for Total BTEX, chloride, and TPH within soils, exclusive of the Reclamation Zone (surface to 4 ft. bgs), are as follows:

| Constituent          | Remediation Limit |
|----------------------|-------------------|
| Chloride             | 10,000 mg/kg      |
| TPH<br>(GRO+DRO+MRO) | 2,500 mg/kg       |
| BTEX                 | 50 mg/kg          |
| Benzene              | 10 mg/kg          |

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**Section 4 – Remediation Activities**

On May 11, 15-17, 19-20, 2023, Terracon mobilized to the site to meet Gandy Construction personnel to perform soil remediation activities. Areas exhibiting visual impact were excavated to a depth of approximately 2 to 12 feet bgs.

Approximately 360 cubic yards of soil were excavated and stockpiled atop a polyethylene liner pending waste characterization and disposal under an approved Form C-138. Excavation efforts ceased based on the results of composite soil sample laboratory analysis indicating no remaining material was above NMOCD RALs. Excavated materials were disposed of at Gandy Landfill Station.

**Section 5 - Remediation Confirmation Assessment**

A total of 49 composite soil samples (N-SW, S-SW, E-SW, W-SW, and FS-01 through FS-12) were collected from the excavation, placed in laboratory-provided sample containers, preserved with ice, and transported under a chain of custody to Cardinal Laboratories in Hobbs, New Mexico for analysis of BTEX, TPH, and chlorides.

**Section 6 – Analytical Results**

On May 11, 15-17, 19-20, and July 3, 2023, 49 composite samples were collected, and 22 of the samples exhibited concentrations of TPH above the laboratory SDLs. Thirteen samples above the laboratory SDLs, resulted in concentrations of TPH below the NMOCD RAL closure criteria of 2,500 mg/kg, and ranged from 10.9 mg/kg in soil sample E-SW-4 at 0-4 feet, to 590 mg/kg in soil sample FS 13 at 4 feet. Nine samples exceeded the NMOCD RAL closure criteria of 100 mg/kg above 4 feet. These 9 samples were remediated and resampled. All resamples exhibited concentrations of TPH below the laboratory SDLs.

All soil samples collected from the excavation area exhibited concentrations of chloride below the NMOCD RAL closure criteria of 10,000 mg/kg and ranged from 32.0 mg/kg in FS-11 at 4 feet to 896 mg/kg in soil sample FS 05 at 11 feet. Nine samples exceeded the NMOCD RAL closure criteria of 600 mg/kg above 4 feet. These 9 samples were remediated and resampled. Six of the resamples exhibited concentrations of chloride above the laboratory SDLs and ranged from 32 mg/kg in soil sample FS 09 at 2 feet, to 16 mg/kg in soil sample W-SW-1.1 at 0-4 feet.

A summary of BTEX, chloride, and TPH concentrations of all collected soil samples is attached as Table 1.

**Frontier Field Services, LLC**

Chaves 6" Steel Line

33.0248282°, -103.9845827°

NMOCD Reference # nAPP2301231426

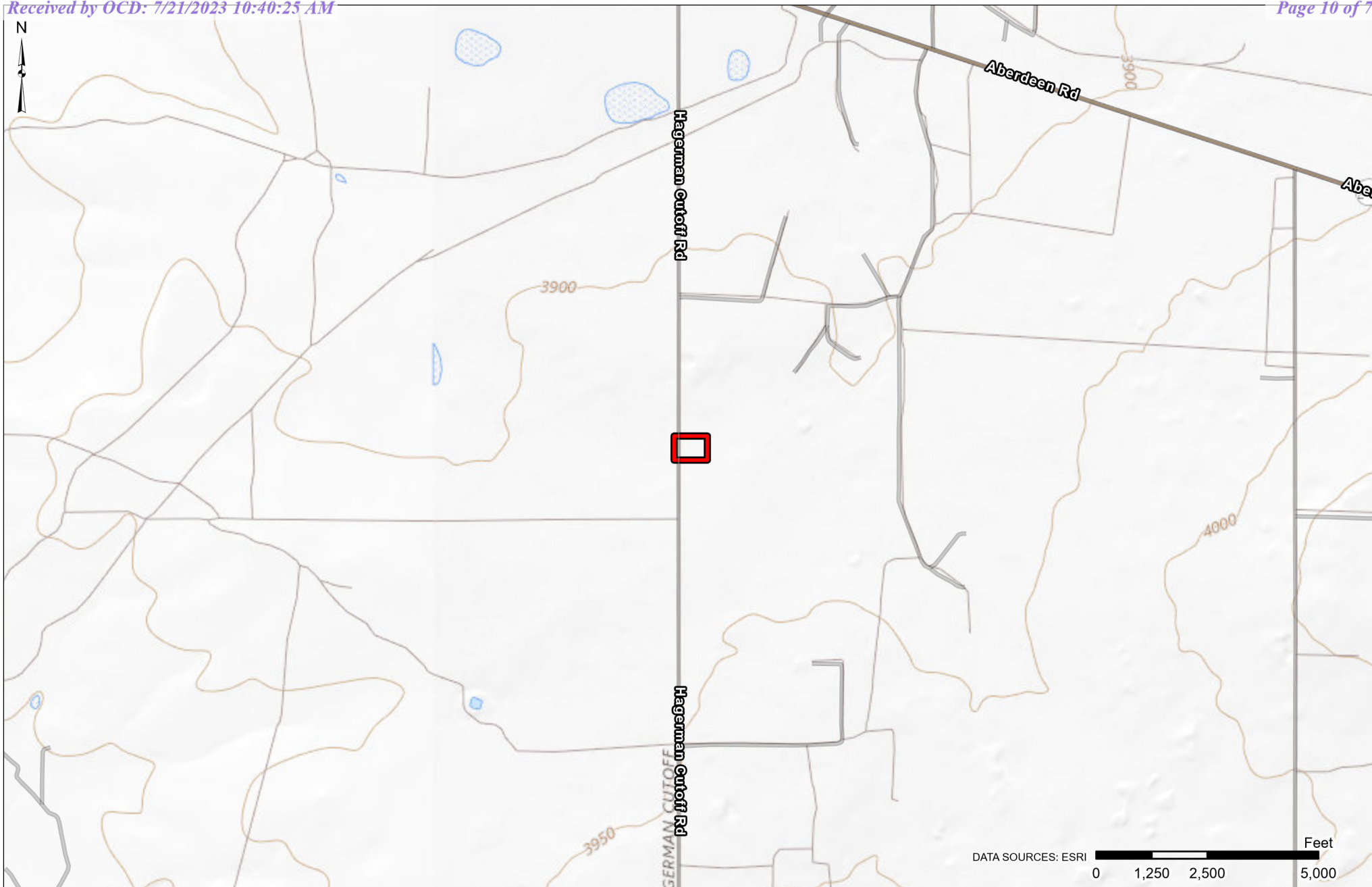
Terracon Project # KH237024



**Section 7 – Conclusion and Closure Request**

In accordance with NMAC 19.15.29.12, remediation of the impacted material is complete, and Terracon along with Frontier Field Services respectfully requests closure of the incident nAPP2301231426.

## **APPENDIX A – EXHIBITS**



 Site Location

Project No.:  
KH237024  
Date:  
Jun 19 2023  
Drawn By:  
JWL  
Reviewed By:  
BSM



4518 W Pierce St  
Carlsbad, NM

PH. 806-300-0140

terracon.com

### Topographic Map

Chaves 6" & 10" Steel Line LP  
33.0248282° -103.9845827°  
Chaves County, New Mexico

### Exhibit


1





 Excavation Boundary

Project No.:  
KH237024  
Date:  
Jul 03 2023  
Drawn By:  
JWL  
Reviewed By:  
BSM

  
4518 W Pierce St  
Carlsbad, NM  
PH. 806-300-0140      terracon.com


**Site Map**  
Chaves 6" & 10" Steel Line LP  
33.0248282° -103.9845827°  
Chaves County, New Mexico

**Exhibit**  
  
**2**





 Wall

 **Terracon**

4518 W Pierce St  
Carlsbad, NM

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PH. 858-300-0140      [terracon.com](http://terracon.com)

# 3






-  Site Location
-  NMOSE POD Location

Project No.:  
KH237024

Date:  
Jun 19 2023

Drawn By:  
JWL

Reviewed By:  
BSM

  
4518 W Pierce St  
Carlsbad, NM  
PH. 806-300-0140      terracon.com

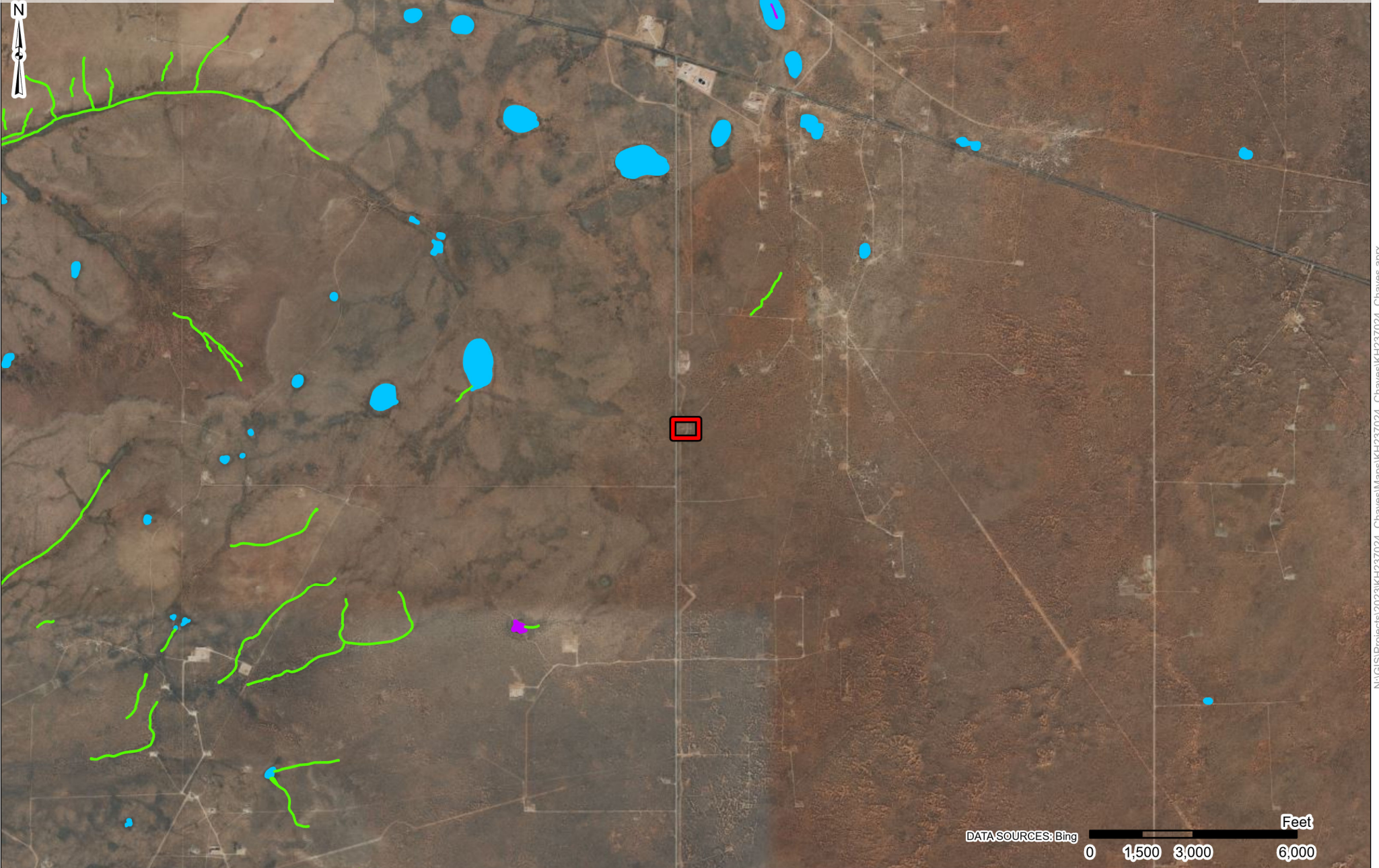
### NMOSE POD Location Map

Chaves 6" & 10" Steel Line LP  
33.0248282° -103.9845827°  
Chaves County, New Mexico

### Exhibit

4





- Site Location
- Freshwater Emergent Wetland
- Freshwater Pond
- Riverine

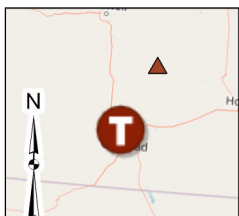
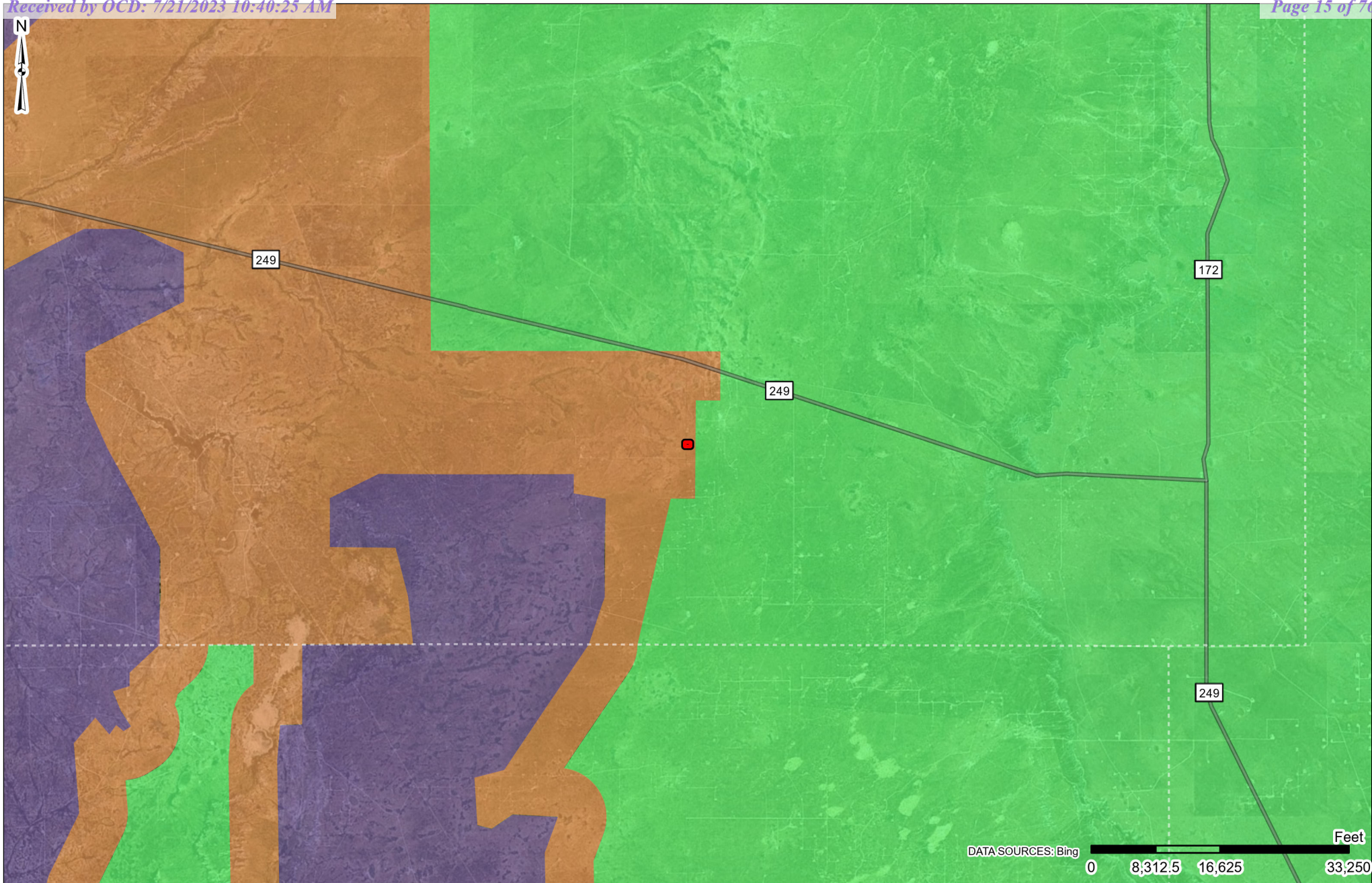
Project No.:  
KH237024  
Date:  
Jun 19 2023  
Drawn By:  
JWL  
Reviewed By:  
BSM

**Terracon**  
4518 W Pierce St  
Carlsbad, NM  
PH. 806-300-0140      terracon.com

**Designated Wetland Map**  
  
Chaves 6" & 10" Steel Line LP  
33.0248282° -103.9845827°  
Chaves County, New Mexico

**Exhibit**  
  
**5**






- Site Location
- Karst Potential**
- Low
- Medium
- High

Project No.:  
KH237024

Date:  
Jul 05 2023

Drawn By:  
JWL

Reviewed By:  
BSM



4518 W Pierce St  
Carlsbad, NM

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PH. 806-300-0140      terracon.com

### Cave Karst Public UPC Map

Chaves 6" & 10" Steel Line LP  
33.0248282° -103.9845827°  
Chaves County, New Mexico

### Exhibit

**6**

## **APPENDIX B – TABLES AND WELL DATA**

| TABLE 1<br>SOIL SAMPLE ANALYTICAL RESULTS - BTEX <sup>1</sup> , Chloride <sup>2</sup> , and TPH <sup>3</sup><br>Chaves 6"<br>Terracon Project No. KH237024 |                           |             |             |                 |        |                     |             |       |         |
|--|---------------------------|-------------|-------------|-----------------|--------|---------------------|-------------|-------|---------|
| Sample I.D.  | Sample Depth<br>(ft. bgs) | Sample Type | Sample Date | BTEX<br>(mg/kg) |        | Chloride<br>(mg/kg) | TPH (8015M) |       |         |
|  |                           |             |             |                 |        |                     | (mg/kg)     |       |         |
|  |                           |             |             |                 |        |                     | GRO         | DRO   | EXT DRO |
| Confirmation Samples (Off Pad)   |                           |             |             |                 |        |                     |             |       |         |
| N-SW-1   | 2-4'                      | Comp        | 05/11/23    | Benzene -       | <0.050 | 688                 | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| N-SW-1   | 0-4                       | Comp        | 07/03/23    | Benzene -       | <0.050 | 16.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| N-SW 02  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 816                 | <50.0       | 569   | 105     |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| N-SW 02  | 5-8'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 688                 | <50.0       | 1,240 | 227     |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| N-SW 02  | 0-4                       | Comp        | 07/03/23    | Benzene -       | <0.050 | <16.0               | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-1   | 1-4'                      | Comp        | 05/11/23    | Benzene -       | <0.050 | 64.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-2   | 0-2'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 144                 | <10.0       | 65.8  | 14.7    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-2   | 2-4'                      | Comp        | 05/11/23    | Benzene -       | <0.050 | 128                 | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-3   | 4-8'                      | Comp        | 05/11/23    | Benzene -       | <0.050 | 336                 | <10.0       | 42.8  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-4   | 0-2'                      | Comp        | 05/16/23    | Benzene -       | <0.050 | 96                  | <10.0       | 10.9  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW-5   | 0-2'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 32                  | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 06  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 64.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 07  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 5,680               | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 07  | 0-4                       | Comp        | 07/03/23    | Benzene -       | <0.050 | <16.0               | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 08  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 5,680               | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 08  | 0-4'                      | Comp        | 07/03/23    | Benzene -       | <0.050 | <16.0               | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| E-SW 09  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 96.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| NMOCD Reclamation Standards <sup>4</sup><br>(Applicable for Soils from the Surface to 4 ft. Below Grade Surface)   |                           |             |             | Benzene -       | 10     | 600                 | 100         |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |
| NMOCD Remediation and Delineation Standards <sup>5</sup><br>(Applicable for Soils at Depths Greater than 4 ft. Below Grade Surface)                        |                           |             |             | Benzene -       | 10     | 10,000              | 2,500       |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

4. New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs

5. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = Not Applicable



| TABLE 1<br>SOIL SAMPLE ANALYTICAL RESULTS - BTEX <sup>1</sup> , Chloride <sup>2</sup> , and TPH <sup>3</sup><br>Chaves 6"<br>Terracon Project No. KH237024 |                           |             |             |                 |        |                     |             |       |         |
|--|---------------------------|-------------|-------------|-----------------|--------|---------------------|-------------|-------|---------|
| Sample I.D.  | Sample Depth<br>(ft. bgs) | Sample Type | Sample Date | BTEX<br>(mg/kg) |        | Chloride<br>(mg/kg) | TPH (8015M) |       |         |
|  |                           |             |             |                 |        |                     | (mg/kg)     |       |         |
|  |                           |             |             |                 |        |                     | GRO         | DRO   | EXT DRO |
| Confirmation Samples (Off Pad)   |                           |             |             |                 |        |                     |             |       |         |
| S-SW-1   | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 64.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-1   | 4-8'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 304                 | <10.0       | 24.5  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-1   | 8-12'                     | Comp        | 05/17/23    | Benzene -       | <0.050 | 304                 | <10.0       | 236   | 60.6    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-02  | 0-4'                      | Comp        | 05/19/23    | Benzene -       | <0.050 | 64.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-02  | 5-8'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 48.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-3   | 0-4'                      | Comp        | 05/19/23    | Benzene -       | <0.050 | 96.0                | <10.0       | 14.0  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| S-SW-4   | 0-4'                      | Comp        | 05/20/23    | Benzene -       | <0.050 | 80.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| W-SW 01  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 1,070               | <50.0       | 617   | 66.6    |
|  |                           |             |             | Total BTEX -    | 0.659  |                     |             |       |         |
| W-SW 01  | 5-8'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 48.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| W-SW 01  | 0-4                       | Comp        | 07/03/23    | Benzene -       | <0.050 | 16.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| W-SW 02  | 0-4'                      | Comp        | 05/17/23    | Benzene -       | 0.065  | 736                 | <50.0       | 1,540 | 273     |
|  |                           |             |             | Total BTEX -    | 1.78   |                     |             |       |         |
| W-SW 02  | 5-8'                      | Comp        | 05/17/23    | Benzene -       | <0.050 | 48.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| W-SW 02  | 0-4                       | Comp        | 07/03/23    | Benzene -       | <0.050 | 16.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS-1   | 4'                        | Comp        | 05/11/23    | Benzene -       | <0.050 | 224                 | <10.0       | 53.6  | 10.0    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS-2   | 4'                        | Comp        | 05/11/23    | Benzene -       | <0.050 | 400                 | <10.0       | 53.8  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS-3   | 4'                        | Comp        | 05/11/23    | Benzene -       | <0.050 | 528                 | <10.0       | 91.0  | 16.9    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| NMOCD Reclamation Standards <sup>4</sup><br>(Applicable for Soils from the Surface to 4 ft. Below Grade Surface)   |                           |             |             | Benzene -       | 10     | 600                 | 100         |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |
| NMOCD Remediation and Delineation Standards <sup>5</sup><br>(Applicable for Soils at Depths Greater than 4 ft. Below Grade)                                |                           |             |             | Benzene -       | 10     | 10,000              | 2,500       |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

4. New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs

5. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed

N/A = Not Applicable

**Bold and Highlight denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Reclamation and/or Remediation and Delineation Standards.**

**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS - BTEX<sup>1</sup>, Chloride<sup>2</sup>, and TPH<sup>3</sup>**  
**Chaves 6"**

**Terracon Project No. KH237024**

| Sample I.D.  | Sample Depth<br>(ft. bgs) | Sample Type | Sample Date | BTEX<br>(mg/kg) |        | Chloride<br>(mg/kg) | TPH (8015M) |       |         |
|--|---------------------------|-------------|-------------|-----------------|--------|---------------------|-------------|-------|---------|
|  |                           |             |             |                 |        |                     | (mg/kg)     |       |         |
|  |                           |             |             |                 |        |                     | GRO         | DRO   | EXT DRO |
| Confirmation Samples (Off Pad)   |                           |             |             |                 |        |                     |             |       |         |
| FS-4   | 8'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 96.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | 0.370  |                     |             |       |         |
| FS 05  | 11'                       | Comp        | 05/17/23    | Benzene -       | <0.050 | 896                 | <10.0       | 388   | 103     |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 06  | 2'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 128                 | <10.0       | 27.5  | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 07  | 8'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 96.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 08  | 2'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 176                 | <10.0       | 110   | 12.9    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 08  | 2'                        | Comp        | 07/03/23    | Benzene -       | <0.050 | 16.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 09  | 2'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 3,680               | <10.0       | 229   | 50.2    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 09  | 2'                        | Comp        | 07/03/23    | Benzene -       | <0.050 | 32.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 10  | 2'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 1,040               | <10.0       | 183   | 28.0    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 10  | 2'                        | Comp        | 07/03/23    | Benzene -       | <0.050 | 16.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 11  | 10'                       | Comp        | 05/17/23    | Benzene -       | <0.050 | 32                  | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 12  | 8'                        | Comp        | 05/17/23    | Benzene -       | <0.050 | 96.0                | <10.0       | <10.0 | <10.0   |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 13  | 4'                        | Comp        | 05/19/23    | Benzene -       | <0.050 | 544                 | <10.0       | 481   | 109     |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 14  | 4'                        | Comp        | 05/19/23    | Benzene -       | <0.050 | 352                 | <10.0       | 289   | 56.1    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 15  | 4'                        | Comp        | 05/19/23    | Benzene -       | <0.050 | 336                 | <10.0       | 265   | 58.2    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| FS 16  | 4'                        | Comp        | 05/19/23    | Benzene -       | <0.050 | 112                 | <10.0       | 164   | 34.0    |
|  |                           |             |             | Total BTEX -    | <0.300 |                     |             |       |         |
| NMOCD Reclamation Standards <sup>4</sup><br>(Applicable for Soils from the Surface to 4 ft. Below Grade Surface)           |                           |             |             | Benzene -       | 10     | 600                 | 100         |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |
| NMOCD Remediation and Delineation Standards <sup>5</sup><br>(Applicable for Soils at Depths Greater than 4 ft. Below Grade |                           |             |             | Benzene -       | 10     | 10,000              | 2,500       |       |         |
|  |                           |             |             | Total BTEX -    | 50     |                     |             |       |         |

1. BTEX = Benzene, toluene, ethylbenzene, total xylenes analyzed by EPA Method 8021B

2. Chloride = Chloride analyzed by EPA Method 300.

3. TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M (GRO/DRO/MRO)

4. New Mexico Administration Code (NMAC) Restoration, Reclamation, and Re-vegetation (19.15.29.13) New Mexico Administration Code (NMAC) – D (Reclamation of areas no longer in use) for soils extending to 4 ft. bgs

5. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards are proposed in 19.15.29.12 NMAC - N, 8/14/2018

< = Constituent not detected above the indicated laboratory SDL

NA = Not Analyzed


N/A = Not Applicable

**Bold and Highlight denotes concentrations that exceed the New Mexico Oil Conservation Division (NMOCD) Reclamation and/or Remediation and Delineation Standards.**



# New Mexico Office of the State Engineer

## Point of Diversion Summary

|                   |              |                                    |     |                    |                      |     |                   |                       |                      |   |
|-------------------|--------------|------------------------------------|-----|--------------------|----------------------|-----|-------------------|-----------------------|----------------------|---|
|                   |              | (quarters are 1=NW 2=NE 3=SW 4=SE) |     |                    |                      |     |                   |                       |                      |   |
|                   |              | (quarters are smallest to largest) |     |                    |                      |     |                   | (NAD83 UTM in meters) |                      |   |
| Well Tag          | POD Number   | Q64                                | Q16 | Q4                 | Sec                  | Tws | Rng               | X                     | Y                    |   |
| 20765             | L 14514 POD1 | 2                                  | 2   | 1                  | 32                   | 15S | 36E               | 595494                | 3649622              |  |
| <hr/>             |              |                                    |     |                    |                      |     |                   |                       |                      |   |
| Driller License:  |              | 1611                               |     | Driller Company:   |                      |     | GOERTZEN DRILLING |                       |                      |   |
| Driller Name:     |              | JOHN GOERTZEN                      |     |                    |                      |     |                   |                       |                      |   |
| Drill Start Date: |              | 08/09/2018                         |     | Drill Finish Date: |                      |     | 08/10/2018        |                       | Plug Date:           |   |
| Log File Date:    |              | 08/17/2018                         |     | PCW Rev Date:      |                      |     |                   |                       | Source: Shallow      |   |
| Pump Type:        |              |                                    |     |                    | Pipe Discharge Size: |     |                   | Estimated Yield:      |                      |   |
| Casing Size:      |              | 5.00                               |     | Depth Well:        |                      |     | 208 feet          |                       | Depth Water: 77 feet |   |

|                                |  |     |        |                               |
|--------------------------------|--|-----|--------|-------------------------------|
| Water Bearing Stratifications: |  | Top | Bottom | Description                   |
|                                |  | 104 | 125    | Sandstone/Gravel/Conglomerate |
|                                |  | 125 | 150    | Sandstone/Gravel/Conglomerate |
|                                |  | 150 | 160    | Sandstone/Gravel/Conglomerate |
|                                |  | 162 | 175    | Other/Unknown                 |
|                                |  | 175 | 185    | Sandstone/Gravel/Conglomerate |
|                                |  | 185 | 202    | Sandstone/Gravel/Conglomerate |
|                                |  | 202 | 205    | Other/Unknown                 |
|                                |  | 205 | 208    | Other/Unknown                 |

|                      |  |     |        |
|----------------------|--|-----|--------|
| Casing Perforations: |  | Top | Bottom |
|                      |  | 0   | 208    |

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.

5/11/23 9:00 AM

POINT OF DIVERSION SUMMARY



## **APPENDIX C – PHOTOGRAPHIC LOG**

Chaves 6" & 10" ■ Eddy County, New Mexico  
June 26, 2023 ■ Terracon Project No. KH237024



PHOTO 1: View of east wall after excavation



PHOTO 4: View of north wall after excavation

Responsive ■ Resourceful ■ Reliable



Chaves 6" & 10" ■ Eddy County, New Mexico  
June 26, 2023 ■ Terracon Project No. KH237024



PHOTO 3: View of south and west walls after excavation



PHOTO 4: View of south wall after excavation

Responsive ■ Resourceful ■ Reliable



Chaves 6" & 10" ■ Eddy County, New Mexico  
June 26, 2023 ■ Terracon Project No. KH237024



PHOTO 5: View of east wall after excavation

Responsive ■ Resourceful ■ Reliable

## **APPENDIX D – ANALYTICAL REPORT AND CHAIN OF CUSTODY**



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

May 17, 2023

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: CHAVES 6-INCH

Enclosed are the results of analyses for samples received by the laboratory on 05/12/23 10:55.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 1 1-4' (H232391-01)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTX      | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 64.0   | 16.0            | 05/15/2023 | ND              | 416 | 104        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 231 | 116        | 200           | 3.05 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/13/2023 | ND              | 214 | 107        | 200           | 1.01 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 113 % 48.2-134

Surrogate: 1-Chlorooctadecane 110 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 2 2-4' (H232391-02)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTX      | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 128    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 231 | 116        | 200           | 3.05 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/13/2023 | ND              | 214 | 107        | 200           | 1.01 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 116 % 48.2-134

Surrogate: 1-Chlorooctadecane 117 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 3 4-8' (H232391-03)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | 0.051  | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | 0.062  | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTX      | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 95.6 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 336    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M               |             | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|-------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                 | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*             | <10.0       | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| <b>DRO &gt;C10-C28*</b> | <b>42.8</b> | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36        | <10.0       | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 92.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 101 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N - SW - 1 2-4' (H232391-04)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTEX     | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

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

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 688    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 92.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 99.5 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 1 4' (H232391-05)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTEx     | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 224    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| DRO >C10-C28*    | 53.6   | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36 | 10.0   | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 2 4' (H232391-06)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTX      | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 400    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| DRO >C10-C28*    | 53.8   | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 96.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 108 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 3 4' (H232391-07)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | <0.150 | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTEx     | <0.300 | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 528    | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| DRO >C10-C28*    | 91.0   | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36 | 16.9   | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 95.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 113 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/12/2023  
 Reported: 05/17/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 4 8' (H232391-08)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |        |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|--------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD    | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/15/2023 | ND              | 2.11 | 105        | 2.00          | 1.52   |           |
| Toluene*       | 0.057  | 0.050           | 05/15/2023 | ND              | 2.24 | 112        | 2.00          | 0.0359 |           |
| Ethylbenzene*  | 0.126  | 0.050           | 05/15/2023 | ND              | 2.40 | 120        | 2.00          | 1.46   |           |
| Total Xylenes* | 0.187  | 0.150           | 05/15/2023 | ND              | 7.16 | 119        | 6.00          | 2.69   |           |
| Total BTEX     | 0.370  | 0.300           | 05/15/2023 | ND              |      |            |               |        |           |

Surrogate: 4-Bromofluorobenzene (PID) 99.7 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 1040   | 16.0            | 05/15/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/13/2023 | ND              | 206 | 103        | 200           | 5.14 |           |
| DRO >C10-C28*    | 470    | 10.0            | 05/13/2023 | ND              | 204 | 102        | 200           | 3.14 |           |
| EXT DRO >C28-C36 | 124    | 10.0            | 05/13/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 83.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

|     |  |
|-----|--|
| ND  | Analyte NOT DETECTED at or above the reporting limit   |
| RPD | Relative Percent Difference  |
| **  | Samples not received at proper temperature of 6°C or below.  |
| *** | Insufficient time to reach temperature.  |
| -   | Chloride by SM4500Cl-B does not require samples be received at or below 6°C<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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

---

Celey D. Keene, Lab Director/Quality Manager



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

[illegible]





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

---

May 22, 2023

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: CHAVES 6-INCH

Enclosed are the results of analyses for samples received by the laboratory on 05/16/23 11:50.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is fluid and cursive, with the first name "Celey" and last name "Keene" clearly distinguishable.

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 1 0-4' (H232451-01)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 5.36 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.29 | 115        | 2.00          | 7.28 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 7.69 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.87 | 114        | 6.00          | 7.05 |           |  |
| Total BTEX     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |  |

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

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 64.0   | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 80.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.5 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 1 4-8' (H232451-02)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 5.36 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.29 | 115        | 2.00          | 7.28 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 7.69 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.87 | 114        | 6.00          | 7.05 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

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

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 304    | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | 24.5   | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 66.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 67.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S - SW - 1 8-12' (H232451-03)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 5.36 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.29 | 115        | 2.00          | 7.28 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.22 | 111        | 2.00          | 7.69 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.87 | 114        | 6.00          | 7.05 |           |  |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 304    | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | 236    | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | 60.6   | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 77.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.4 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 2 0-2' (H232451-04)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 144    | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | 65.8   | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | 14.7   | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 70.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.1 % 49.1-148

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TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 0 0-2' (H232451-05)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 96.0   | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | 10.9   | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 89.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.6 % 49.1-148

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 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E - SW - 5 0-2' (H232451-06)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 32.0   | 16.0            | 05/17/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 9 2' (H232451-07)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEX     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 3680   | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | 229    | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | 50.2   | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 82.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.2 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 11 10' (H232451-08)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 32.0   | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 203 | 101        | 200           | 20.5 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/17/2023 | ND              | 217 | 108        | 200           | 26.5 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 87.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

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 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 8 2' (H232451-09)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |  |
| Total BTEX     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 176    | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |       |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 2.80  |           |
| DRO >C10-C28*    | 110    | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 0.380 |           |
| EXT DRO >C28-C36 | 12.9   | 10.0            | 05/17/2023 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 77.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 80.0 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/11/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 5 11' (H232451-10)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 110 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 896    | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |       |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 2.80  |           |
| DRO >C10-C28*    | 388    | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 0.380 |           |
| EXT DRO >C28-C36 | 103    | 10.0            | 05/17/2023 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 79.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 83.7 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 7 2' (H232451-11)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |
| Total BTX      | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 176    | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |       |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 2.80  |           |
| DRO >C10-C28*    | 209    | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 0.380 |           |
| EXT DRO >C28-C36 | 36.6   | 10.0            | 05/17/2023 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 83.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.1 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 10 2' (H232451-12)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |  |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 1040   | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |       |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 2.80  |           |
| DRO >C10-C28*    | 183    | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 0.380 |           |
| EXT DRO >C28-C36 | 28.0   | 10.0            | 05/17/2023 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 81.2 % 48.2-134

Surrogate: 1-Chlorooctadecane 84.1 % 49.1-148

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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/16/2023  
 Reported: 05/22/2023  
 Project Name: CHAVES 6-INCH  
 Project Number: NONE GIVEN  
 Project Location: DURANGO

Sampling Date: 05/15/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS - 6 2' (H232451-13)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH/ |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|------------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank     | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.11 | 106        | 2.00          | 2.98 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/18/2023 | ND               | 2.17 | 109        | 2.00          | 4.82 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/18/2023 | ND               | 2.23 | 112        | 2.00          | 4.93 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/18/2023 | ND               | 6.56 | 109        | 6.00          | 5.45 |           |  |
| Total BTEx     | <0.300 | 0.300           | 05/18/2023 | ND               |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 108 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 128    | 16.0            | 05/17/2023 | ND              | 416 | 104        | 400           | 3.77 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |       |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|-------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD   | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 2.80  |           |
| DRO >C10-C28*    | 27.5   | 10.0            | 05/17/2023 | ND              | 158 | 78.9       | 200           | 0.380 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/17/2023 | ND              |     |            |               |       |           |

Surrogate: 1-Chlorooctane 76.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.6 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

|       |  |
|-------|--|
| QR-04 | The RPD for the BS/BSD was outside of historical limits.   |
| ND    | Analyte NOT DETECTED at or above the reporting limit   |
| RPD   | Relative Percent Difference  |
| **    | Samples not received at proper temperature of 6°C or below.  |
| ***   | Insufficient time to reach temperature.  |
| -     | Chloride by SM4500Cl-B does not require samples be received at or below 6°C<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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

---

Celey D. Keene, Lab Director/Quality Manager



ANALYSIS REQUEST

| Lab I.D. | Sample I.D. | (G)RAB OR (C)OMP | # CONTAINERS | GROUNDWATER | WASTEWATER | SOIL | OIL | SLUDGE | OTHER : | ACID/BASE: | ICE / COOL | OTHER : | DATE    | TIME  | Chloride (EPA Meth | TPH Extended 80 | BTEX (EPA Meth |
|----------|-------------|------------------|--------------|-------------|------------|------|-----|--------|---------|------------|------------|---------|---------|-------|--------------------|-----------------|----------------|
| H332151  | S-SW-1      | 0-4'             | C            |             |            |      |     |        |         |            |            |         | 5-15-23 | 2:29  | /                  | /               | /              |
|          | S-SW-1      | 4-8'             | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:08 | /                  | /               | /              |
|          | S-SW-1      | 8-12'            | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:11 | /                  | /               | /              |
|          | E-SW-2      | 0-2'             | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:23 | /                  | /               | /              |
|          | E-SW-2      | 0-2'             | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:23 | /                  | /               | /              |
|          | E-SW-0      | 0-2'             | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:18 | /                  | /               | /              |
|          | E-SW-5      | 0-2'             | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:25 | /                  | /               | /              |
|          | E-SW-9      | 2'               | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:15 | /                  | /               | /              |
|          | E-SW-11     | 10'              | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:28 | /                  | /               | /              |
|          | E-SW-8      | 2'               | C            |             |            | /    |     |        |         |            | /          |         | 5-15-23 | 10:06 | /                  | /               | /              |

Relinquished By:  Date: 5-16-23  
Received By:   
Verbal Result: ☐ Yes ☐ No Add'l Phone #:  
All Results are emailed. Please provide Email address:

† Cardinal cannot accept verbal changes. Please email changes to [celey.keene@cardinallabsnm.com](mailto:celey.keene@cardinallabsnm.com)





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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon

**BILL TO**

ANALYSIS REQUEST

Project Manager: Joseph Guesnier

P.O. #:

Address: 4518 W. Perice Street

Company: *Burns & McDonnell*

City: Carlsbad

State: NM Zip: 88220

Attn: *Lupe Castro*

Phone #: 8065077057

Fax #:

Address:

Project #:

Project Owner:

City:

Project Name: *Ames 6"*

State: Zip:

Project Location:

Phone #:

Sampler Name: Travis Casey

Fax #:

FOR LAB USE ONLY

Lab I.D.

Sample I.D.

*H332451*

*10*

*FS-5*

*11'*

*2'*

*2'*

*2'*

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

May 23, 2023

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: CHAVES 6" & 10"

Enclosed are the results of analyses for samples received by the laboratory on 05/17/23 14:25.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-22-15. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N-SW 02 0-4' (H232500-01)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTX      | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 816    | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <50.0  | 50.0            | 05/19/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | 569    | 50.0            | 05/19/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | 105    | 50.0            | 05/19/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 118 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: N-SW 02 5-8' (H232500-02)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | 0.077  | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | 0.216  | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTEX     | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 107 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 688    | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <50.0  | 50.0            | 05/19/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | 1240   | 50.0            | 05/19/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | 227    | 50.0            | 05/19/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 120 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager





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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W-SW 01 0-4' (H232500-03)**

| BTEX 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | 0.068  | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | 0.234  | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | 0.358  | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTEX     | 0.659  | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

| Chloride, SM4500Cl-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 1070   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <50.0  | 50.0            | 05/19/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | 617    | 50.0            | 05/19/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | 66.6   | 50.0            | 05/19/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 80.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.2 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W-SW 01 5-8' (H232500-04)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTX      | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

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

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 48.0   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/18/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/18/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/18/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 54.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 52.9 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W-SW 02 0-4' (H232500-05)**

| BTEx 8021B            |              | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|-----------------------|--------------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte               | Result       | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Benzene*</b>       | <b>0.065</b> | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| <b>Toluene*</b>       | <b>0.313</b> | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| <b>Ethylbenzene*</b>  | <b>0.379</b> | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| <b>Total Xylenes*</b> | <b>1.03</b>  | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| <b>Total BTEX</b>     | <b>1.78</b>  | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

| Chloride, SM4500Cl-B |            | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result     | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| <b>Chloride</b>      | <b>736</b> | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M                  |             | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|----------------------------|-------------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte                    | Result      | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*                | <50.0       | 50.0            | 05/19/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| <b>DRO &gt;C10-C28*</b>    | <b>1540</b> | 50.0            | 05/19/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| <b>EXT DRO &gt;C28-C36</b> | <b>273</b>  | 50.0            | 05/19/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 110 % 48.2-134

Surrogate: 1-Chlorooctadecane 127 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: W-SW 02 5-8' (H232500-06)**

| BTEx 8021B     |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |  |
| Total BTEx     | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 48.0   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/19/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/19/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/19/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 75.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 81.3 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager





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

**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: S-SW 02 5-8' (H232500-07)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTX      | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |  |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|--|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |  |
| Chloride             | 48.0   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |  |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/18/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/18/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/18/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 52.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 50.7 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: FS 12 (H232500-08)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |
| Total BTX      | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |

Surrogate: 4-Bromofluorobenzene (PID) 100 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 96.0   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/18/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/18/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/18/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 82.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.4 % 49.1-148

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**Analytical Results For:**

TERRACON CONSULTANTS  
 JOSEPH GUESNIER  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received: 05/17/2023  
 Reported: 05/23/2023  
 Project Name: CHAVES 6" & 10"  
 Project Number: KH237024  
 Project Location: DURANGO - LEA

Sampling Date: 05/17/2023  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: E-SW 06 0-4' (H232500-09)**

| BTX 8021B      |        | mg/kg           |            | Analyzed By: JH |      |            |               |      |           |  |
|----------------|--------|-----------------|------------|-----------------|------|------------|---------------|------|-----------|--|
| Analyte        | Result | Reporting Limit | Analyzed   | Method Blank    | BS   | % Recovery | True Value QC | RPD  | Qualifier |  |
| Benzene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.36 | 118        | 2.00          | 4.23 |           |  |
| Toluene*       | <0.050 | 0.050           | 05/20/2023 | ND              | 2.32 | 116        | 2.00          | 4.90 |           |  |
| Ethylbenzene*  | <0.050 | 0.050           | 05/20/2023 | ND              | 2.25 | 113        | 2.00          | 4.65 |           |  |
| Total Xylenes* | <0.150 | 0.150           | 05/20/2023 | ND              | 6.87 | 114        | 6.00          | 3.07 |           |  |
| Total BTX      | <0.300 | 0.300           | 05/20/2023 | ND              |      |            |               |      |           |  |

Surrogate: 4-Bromofluorobenzene (PID) 101 % 71.5-134

| Chloride, SM4500CI-B |        | mg/kg           |            | Analyzed By: AC |     |            |               |      |           |
|----------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte              | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| Chloride             | 64.0   | 16.0            | 05/18/2023 | ND              | 432 | 108        | 400           | 0.00 |           |

| TPH 8015M        |        | mg/kg           |            | Analyzed By: MS |     |            |               |      |           |
|------------------|--------|-----------------|------------|-----------------|-----|------------|---------------|------|-----------|
| Analyte          | Result | Reporting Limit | Analyzed   | Method Blank    | BS  | % Recovery | True Value QC | RPD  | Qualifier |
| GRO C6-C10*      | <10.0  | 10.0            | 05/18/2023 | ND              | 191 | 95.4       | 200           | 2.92 |           |
| DRO >C10-C28*    | <10.0  | 10.0            | 05/18/2023 | ND              | 186 | 92.8       | 200           | 7.40 |           |
| EXT DRO >C28-C36 | <10.0  | 10.0            | 05/18/2023 | ND              |     |            |               |      |           |

Surrogate: 1-Chlorooctane 89.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.3 % 49.1-148

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### Notes and Definitions

|      |  |
|------|--|
| BS-3 | Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.                            |
| ND   | Analyte NOT DETECTED at or above the reporting limit   |
| RPD  | Relative Percent Difference  |
| **   | Samples not received at proper temperature of 6°C or below.  |
| ***  | Insufficient time to reach temperature.  |
| -    | Chloride by SM4500Cl-B does not require samples be received at or below 6°C<br>Samples reported on an as received basis (wet) unless otherwise noted on report |

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

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Celey D. Keene, Lab Director/Quality Manager



## CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Page 12 of 12

## **APPENDIX E – INITIAL C-141 AND FINAL C-141**

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 DepartmentOil 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    | nAPP2301231426 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Release Notification

## Responsible Party

|  |                                |
|--|--------------------------------|
| Responsible Party Frontier Field Services, LLC   | OGRID 221115                   |
| Contact Name Amber Groves  | Contact Telephone 575-703-7992 |
| Contact email <a href="mailto:agroves@durangomidstream.com">agroves@durangomidstream.com</a> | Incident # (assigned by OCD)   |
| Contact mailing address 47 Conoco Rd, Maljamar NM 88264                                      |                                |

## Location of Release Source

Latitude 33.02477 Longitude -103.98419  
(NAD 83 in decimal degrees to 5 decimal places)

|                                   |                      |
|-----------------------------------|----------------------|
| Site Name Chaves 6" Steel Line    | Site Type Pipeline   |
| Date Release Discovered 1/10/2023 | API# (if applicable) |

| Unit Letter | Section | Township | Range | County |
|-------------|---------|----------|-------|--------|
| N           | 12      | 15S      | 29E   | Chaves |

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

## Nature and Volume of Release

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

|   |  |  |
|---|--|--|
| <input type="checkbox"/> Crude Oil              | Volume Released (bbls)   | Volume Recovered (bbls)                                  |
| <input type="checkbox"/> Produced Water         | Volume Released (bbls)   | Volume Recovered (bbls)                                  |
|   | Is the concentration of dissolved chloride in the produced water >10,000 mg/l? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| <input checked="" type="checkbox"/> Condensate  | Volume Released (bbls) 4   | Volume Recovered (bbls)                                  |
| <input checked="" type="checkbox"/> Natural Gas | Volume Released (Mcf) 288.99   | Volume Recovered (Mcf)                                   |
| <input type="checkbox"/> Other (describe)       | Volume/Weight Released (provide units)   | Volume/Weight Recovered (provide units)                  |

Cause of Release

External &amp; Internal corrosion on bottom of pipeline.



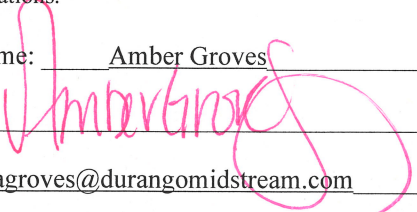
## Oil Conservation Division

|                |                |
|----------------|----------------|
| Incident ID    | nAPP2301231426 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

|   |  |
|---|--|
| Was this a major release as defined by 19.15.29.7(A) NMAC?<br><br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | If YES, for what reason(s) does the responsible party consider this a major release? |
|   |  |

**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>Amber Groves</u>  | Title: <u>Senior Environmental Specialist</u> |
| Signature: <u></u>  | Date: <u>1/12/2023</u>                        |
| email: <u>agroves@durangomidstream.com</u>   | Telephone: <u>(575)703-7992</u>               |
| <b><u>OCD Only</u></b>   |   |
| Received by: _____   | Date: _____                                   |



## Gas Volume Release Report

| Gas Release Volume Calculator       |  |  |
|-------------------------------------|--|--|
| Date:                               | 1/10/2023  |  |
| Site or Line Name:                  | Chaves 6" Steel Line                                 |  |
| Area of Hole in Pipe:               | 0.25   | square inches  |
| Absolute Pressure:                  | 50.7   | psia - absolute pressure (psia = psig gauge pressure + 14.7) |
| Duration of Release:                | 300.00   | minutes  |
| Actual Temperature:                 | 66   | Degrees F  |
| Representative Gas Analysis         | Please attach or email a representative gas analysis |  |
| Constants                           |  |  |
| Temperature at standard conditions: | 60   | Deg. F   |
| Pressure at standard conditions:    | 14.7   | PSIA   |
| Volume of Gas - ACF                 | 85.05  | MACF   |
| Volume of Gas - SCF                 | 289.99   | MSCF   |

| Notes            |
|------------------|
| Entered by user  |
| Calculated Value |
| Constant         |





## Liquid Volume Release Report

| Liquid Release Volume Calculator |                      |        |       |                          |            |                   |                  |  |
|----------------------------------|----------------------|--------|-------|--------------------------|------------|-------------------|------------------|--|
| Date:                            | 1/10/2023            |        |       |                          |            |                   |                  |  |
| Site or Line Name:               | Chaves 6" Steel Line |        |       |                          |            |                   |                  |  |
| Soil Type                        | Porosity             | Length | Width | Depth<br>(.083 per inch) | Cubic Feet | Estimated Barrels | Soil Type        |  |
| Clay                             | 0.15                 |        |       |                          | 0          | 0.00              | Clay             |  |
| Sandy Clay                       | 0.12                 |        |       |                          | 0          | 0.00              | Sandy Clay       |  |
| Silt                             | 0.16                 |        |       |                          | 0          | 0.00              | Silt             |  |
| Fine Sand                        | 0.16                 |        |       |                          | 0          | 0.00              | Fine Sand        |  |
| Medium Sand                      | 0.25                 |        |       |                          | 0          | 0.00              | Medium Sand      |  |
| Coarse Sand                      | 0.26                 |        |       |                          | 0          | 0.00              | Coarse Sand      |  |
| Gravely Sand                     | 0.26                 | 24.75  | 14    | 0.249                    | 86.2785    | 4.00              | Gravely Sand     |  |
| Fine Gravel                      | 0.26                 |        |       |                          | 0          | 0.00              | Fine Gravel      |  |
| Medium Gravel                    | 0.20                 |        |       |                          | 0          | 0.00              | Medium Gravel    |  |
| Coarse Gravel                    | 0.18                 |        |       |                          | 0          | 0.00              | Coarse Gravel    |  |
| Sandstone                        | 0.25                 |        |       |                          | 0          | 0.00              | Sandstone        |  |
| Siltstone                        | 0.18                 |        |       |                          | 0          | 0.00              | Siltstone        |  |
| Limestone                        | 0.13                 |        |       |                          | 0          | 0.00              | Limestone        |  |
| Basalt                           | 0.19                 |        |       |                          | 0          | 0.00              | Basalt           |  |
| Standing Liquids                 | X                    |        |       |                          | 0          | 0.00              | Standing Liquids |  |

Choose the one prevailing ground type for estimating spill volumes at a single location. Standing liquids are figured separately using the green cell.

Note that the depth should be measured in feet and tenths of feet (1 inch = .083)

Cubic Feet = L x W x D

Estimated Barrels = ((Cubic Feet x Porosity) / 5.61)

|                |                |
|----------------|----------------|
| Incident ID    | nAPP2301231426 |
| 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?   | <u>77</u> (ft bgs)  |
| Did this release impact groundwater or surface water?   | <input type="checkbox"/> Yes <input checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/> No |
| Are the lateral extents of the release within 300 feet of a wetland?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying a subsurface mine?   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release overlying an unstable area such as karst geology?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Are the lateral extents of the release within a 100-year floodplain?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Did the release impact areas <b>not</b> on an exploration, development, production, or storage site?  | <input type="checkbox"/> Yes <input checked="" 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    | nAPP2301231426 |
| 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: Lupe Carrasco Title: Sr. Environmental Specialist

Signature: Lupe Carrasco Date: 7/21/23

email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 7/21/2023

|                |                |
|----------------|----------------|
| Incident ID    | nAPP2301231426 |
| District RP    |                |
| Facility ID    |                |
| Application ID |                |

## Remediation Plan

**Remediation Plan Checklist:** *Each of the following items must be included in the plan.*

- ☒ Detailed description of proposed remediation technique
- ☒ Scaled sitemap with GPS coordinates showing delineation points
- ☒ Estimated volume of material to be remediated
- ☒ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☒ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

**Deferral Requests Only:** *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☐ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☐ Extents of contamination must be fully delineated.
- ☐ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Lupe Carrasco Title: Sr. Environmental Specialist  
Signature: Lupe Carrasco Date: 7/21/23  
email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 7/21/2023

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

|                |                |
|----------------|----------------|
| Incident ID    | nAPP2301231426 |
| 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: Lupe Carrasco Title: Sr. Environmental Specialist  
Signature: Lupe Carrasco Date: 7/21/23  
email: gcarrasco@durangomidstream.com Telephone: 575-725-0787

**OCD Only**

Received by: Shelly Wells Date: 7/21/2023

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: Ashley Maxwell Date: 11/29/2023  
Printed Name: Ashley Maxwell Title: Environmental Specialist



## **APPENDIX F – TERRACON STANDARD OF CARE, LIMITATION, AND RELIANCE**

### **Standard of Care**

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the scope of work agreed with you, Durango Midstream LLC, as reflected in our proposal (PKH227021).

### **Additional Scope Limitations**

The development of this Amended RAP is based upon information provided by the Client and Terracon's remediation and construction services line. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by the Client. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

### **Reliance**

This report has been prepared for the exclusive use of Durango Midstream LLC, and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Durango Midstream LLC and Terracon. Any unauthorized distribution or reuse is at Durango Midstream LLC sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Durango Midstream LLC and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Durango Midstream LLC and all relying parties unless otherwise agreed in writing.

**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 243117

CONDITIONS

|  |   |
|--|---|
| Operator:<br>FRONTIER FIELD SERVICES, LLC<br>10077 Grogans Mill Rd.<br>The Woodlands, TX 77380 | OGRID:<br>221115  |
|  | Action Number:<br>243117                                  |
|  | Action Type:<br>[C-141] Release Corrective Action (C-141) |

CONDITIONS

| Created By | Condition | Condition Date |
|------------|-----------|----------------|
| amaxwell   | None      | 11/29/2023     |