



# Site Characterization Report and Remediation Workplan

July 14, 2024

**West Eumont Unit #115  
Produced Water Release  
Incident No. nAPP2316654395  
Lea County, New Mexico**

**Prepared For:**

Forty Acres Energy, LLC  
11757 Katy Freeway, Suite 725  
Houston, Texas 77079

**Prepared By:**

Crain Environmental  
2925 East 17<sup>th</sup> Street  
Odessa, Texas 79761

A handwritten signature in blue ink that reads 'Cynthia K. Crain'.

Cynthia K. Crain, P.G.



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## 1.0 Introduction

Crain Environmental (CE), on behalf of Forty Acres Energy, LLC (FAE), has prepared this *Site Characterization Report and Remediation Workplan* for the produced water release at West Eumont Unit #115 (Site), located approximately 13 miles northwest of Eunice and approximately 15 miles southwest of Hobbs, in Lea County, New Mexico. The global positioning system (GPS) coordinates for the release are 32.504256, -103.329739. The property surface rights are privately owned. Land use in the Site vicinity is primarily oil and gas production activity and cattle grazing. The location of the Site is depicted on Figure 1.

## 2.0 Background

On May 26, 2023, a release from an injection line located at the West Eumont Unit #115 was discovered. As a result of corrosion of the line, approximately 15 barrels (bbls) of produced water were released. Immediately following the release, the area was secured, a vacuum truck was mobilized to the Site, and the line was repaired. The released fluid covered a surface area of approximately 3,000 square feet on the well pad. Approximately 5 bbl of fluid were recovered. The release point and the surface extent of the release are depicted on Figure 2.

A Notification of Release (NOR) was submitted to the New Mexico Oil Conservation Division (NMOCD) on June 15, 2023, and Incident #nAPP2316654395 was assigned. An Initial Form C-141 (Release Notification Report) was submitted on September 1, 2023. On April 17, 2024, a 90-day extension was approved for submittal of a Site Characterization Report and Remediation Workplan by July 16, 2024. Appendix A provides a copy of the C-141. Appendix B provides a copy of NMOCD correspondence.

This *Site Characterization Report and Remediation Workplan* has been prepared prior to the due date of July 16, 2024, in accordance with 19.15.29.11 New Mexico Administrative Code (NMAC).

## 3.0 NMOCD Closure Criteria

Cleanup standards for produced water spills are provided in 19.15.29 NMAC. The cleanup standards (described in the rule as "Closure Criteria") are based primarily on depth to groundwater but are also based on other criteria. Three different Closure Criteria are provided in the rule. The most stringent apply to sites where groundwater is found within 50 feet of the ground surface or if the release occurred within one of the following areas:

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
- Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary highwater mark).
- Within 300 feet from an occupied permanent residence, school, hospital, institution or church.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
- Within 1,000 feet of any fresh water well or spring.



- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
- Within 300 feet of a wetland.
- Within the area overlying a subsurface mine.
- Within an unstable area such as a karst formation.
- Within a 100-year floodplain.

CE reviewed available information to determine the Closure Criteria for the Site. The findings of this evaluation are summarized below.

### 3.1 Groundwater Evaluation

A review of the New Mexico Office of the State Engineer (NMOSE) records indicated there are no water wells located within 1 mile of the Site. Based on the absence of water well data, the most stringent NMOCD Closure Criteria will apply to the Site.

### 3.2 Surface Features and Other Development

CE reviewed recent aerial photographs, topographic maps, the NMOSE Point of Discharge (POD) GIS website, and information available from the Lea County, New Mexico Central Appraisal District website. As shown on Figure 1, the Site is not located:

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
  - No continuously flowing watercourses (rivers, streams, arroyos, etc.) are apparent within 300 feet of the Site in the topographic map (Figure 1).
- Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary highwater mark).
  - The topographic map (Figure 1) indicates there is not a lakebed, sinkhole or playa lake located within 200 feet of the Site.
- Within 300 feet from an occupied permanent residence, school, hospital, institution or church.
  - The Site Location Map (Figure 1) and information available from the Lea County, New Mexico Central Appraisal District do not show or list any permanent residence, school, hospital, institution or church located within 300 feet of the Site.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
  - No wells or springs located within 500 feet of the Site appear in any of the NMOSE records reviewed by CE.
- Within 1,000 feet of any fresh water well or spring.
  - No freshwater wells or springs located within 1,000 feet of the Site appear in any of the records reviewed by CE.
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.



- Based on the property and other records review by CE, the Site is not located in incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within the area overlying a subsurface mine.
  - Based on the property and other records reviewed by CE, the Site is not located within an area overlying a subsurface mine.

### 3.3 Wetlands, Floodplain, and Karst Geology

A review of the United States Fish and Wildlife Service (USFWS) wetlands map indicated the Site is not located within 300 feet of a wetland. The New Mexico Bureau of Land Management (BLM) karst potential map indicates the Site is located within a “low karst potential” area. Finally, review of the Federal Emergency Management Act (FEMA) floodplain map indicates the release at the Site is located outside of a 100-year floodplain. Figures 4, 5, and 6 depict the USFWS map, the FEMA floodplain map, and the karst potential map, respectively.

### 3.4 Closure Criteria Currently Assumed Applicable to the Site

A review of the New Mexico Office of the State Engineer (NMOSE) records indicated there were no water wells located within 0.5 mile of the Site; therefore, the Closure Criteria applicable to the Site will be based on the most stringent regulatory guidelines associated with groundwater depths of less than 50 feet below ground surface (bgs). A summary of the Closure Criteria is provided in the table below and in Table 1. Figure 3 provides a 0.5-mile radius circle around the Site.

**NMOCD Closure Criteria**

Constituent of Concern		Closure Criteria Based on Depth to Groundwater (mg/kg)		
		≤ 50 feet bgs	51 feet to 100 feet bgs	> 100 feet bgs
Chloride (EPA 300)		600	10,000	20,000
TPH (EPA 8015M)	GRO + DRO + MRO	100	2,500	2,500
	GRO + DRO	NA	1,000	1,000
Total BTEX (EPA 8021 or 8260)		50	50	50
Benzene (EPA 8021 or 8260)		10	10	10

Notes: NA = not applicable  
 bgs = below ground surface  
 mg/kg = milligrams per kilogram  
 GRO = gasoline range organics  
 DRO = diesel range organics  
 MRO = motor oil range organics  
 TPH = total petroleum hydrocarbons  
 BTEX = benzene, toluene, ethylbenzene, and total xylenes  
 Green highlighted cells denote applicable Closure Criteria.



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#### **4.0 Site Assessment/Characterization Results**

As per 19.15.29.11 NMAC, a Site Characterization Report will have the components described in Sections 4.1 through 4.5 of this document.

##### **4.1 Site Map**

As required by 19.15.29.11 NMAC, a scaled diagram showing significant Site infrastructure, sample point locations, and known subsurface features such as utilities is provided as Figure 2.

##### **4.2 Depth to Groundwater**

As discussed in Section 3.1, the exact depth to groundwater beneath the Site is unknown. During investigation activities, a maximum depth of 5 feet bgs was reached, at which groundwater was not encountered. No water wells are located within 0.5 mile of the Site; therefore, depth to groundwater is assumed to be less than 50' bgs.

##### **4.3 Wellhead Protection Area**

The 0.5-mile wellhead protection area is shown on Figure 3. No known water wells are located within 0.5 mile of the Site. There were no other water sources, springs, or other sources of freshwater extraction identified within 0.5-mile of the Site.

##### **4.4 Distance to Nearest Significant Watercourse**

The horizontal distance to the nearest significant watercourse as defined in Subsection P of 19.15.17.7 NMAC is greater than 0.5-mile from the Site.

##### **4.5 Initial Delineation Activities**

On January 22, January 23, and February 29, 2024, soil samples (DS-1 through DS-11) were collected by Terracon at 11 locations throughout the release area to determine the vertical and horizontal limits of the impact. Samples were collected from each location at a depth of 0.5' bgs, a total depth of 5' bgs, and at an intermediate depth of 2.5' bgs at samples DS-05 through DS-11. Soil samples were placed in clean glass sample jars, properly labeled, immediately placed on ice and hand delivered to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico under proper chain-of-custody control. All samples were analyzed for total petroleum hydrocarbons (TPH) by Environmental Protection Agency (EPA) SW-846 Method 8015 Modified, for benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX) by EPA SW-846 Method 8021B, and for chlorides by Method SM4500Cl.

Table 1 provides a summary of the laboratory results, and sample locations are provided on Figure 2. The laboratory reports and chain-of-custody documentation are provided in Appendix C. Photographic documentation of the release point is provided in Appendix D.

Referring to Table 1, concentrations of BTEX and TPH were reported below the test method detection limits in all samples. Concentrations of chlorides exceeded the Closure Criteria at all sample locations except for DS-06 and DS-10, as shown on Figure 2.



Soils with chloride exceedances will be addressed in accordance with the Proposed Remediation Workplan discussed in Section 5.0.

#### **4.6 Laboratory Analytical Data Quality Assurance/Quality Control Results**

Laboratory data in Report Numbers H240280, H240305, and H241020 generated by Cardinal, was reviewed to ensure that reported analytical results met data quality objectives. It was determined by quality control data associated with analytical results that reported concentrations of target analytes are defensible and that measurement data reliability is within the expected limits of sampling and analytical error. All analytical results are usable for characterization of soil at the Site. The laboratory analytical results are provided as Appendix C.

#### **5.0 Proposed Remediation Workplan**

Benzene, BTEX, and TPH concentrations were reported below the test method detection limits in all samples. Concentrations of chlorides were reported above the Closure Criteria in 9 samples, as listed on Table 1 and shown on Figure 2.

FAE proposes to excavate all impacted soil until confirmation samples collected from the bottom and sidewalls of the excavation report chloride concentrations below the NMOCD Closure Criteria. As initial BTEX and TPH concentrations were below the test method detection limits, each confirmation sample will be analyzed only for chlorides. Pursuant to 19.15.29.12(D) NMAC, confirmation samples will consist of five-point composite samples, and discrete grab samples will be collected from any wet or discolored areas. Samples collected by Terracon on January 22, January 23, and February 29, 2024, will be used to determine the necessary area of excavation. The excavated material will be transported under manifest to a NMOCD approved disposal facility.

Upon receipt of laboratory results that all chloride concentrations are below the Closure Criteria, the excavation will be backfilled to grade with non-impacted similar material obtained from a landowner pit. Pursuant to 19.15.29.13 NMAC, the impacted surface areas will be restored to pre-release conditions. Surface grading will be performed to near original conditions and contoured to prevent erosion and ponding, promote stability, and preserve storm water flow patterns.

FAE respectfully requests a remediation schedule of 90 days from the date of NMOCD approval of this Remediation Workplan to complete the proposed remediation activities and submit a *Remediation Summary and Closure Report* for NMOCD approval. The Closure Report will summarize remedial activities and confirmation sampling results and will include the final Form C-141.



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## 6.0 Distribution

Copy 1: Mike Bratcher  
New Mexico Energy, Minerals, and Natural Resources Department  
Oil Conservation Division, District 2  
811 S. First Street  
Artesia, New Mexico 88210

Copy 2: Ryan Swift  
Forty Acres Energy, LLC  
11757 Katy Freeway, Suite 725  
Houston, Texas 77079





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## TABLE

TABLE 1  
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS  
FORTY ACRES ENERGY, LLC  
WEST EUMONT UNIT #115  
NMOCD INCIDENT # nAPP2316654395

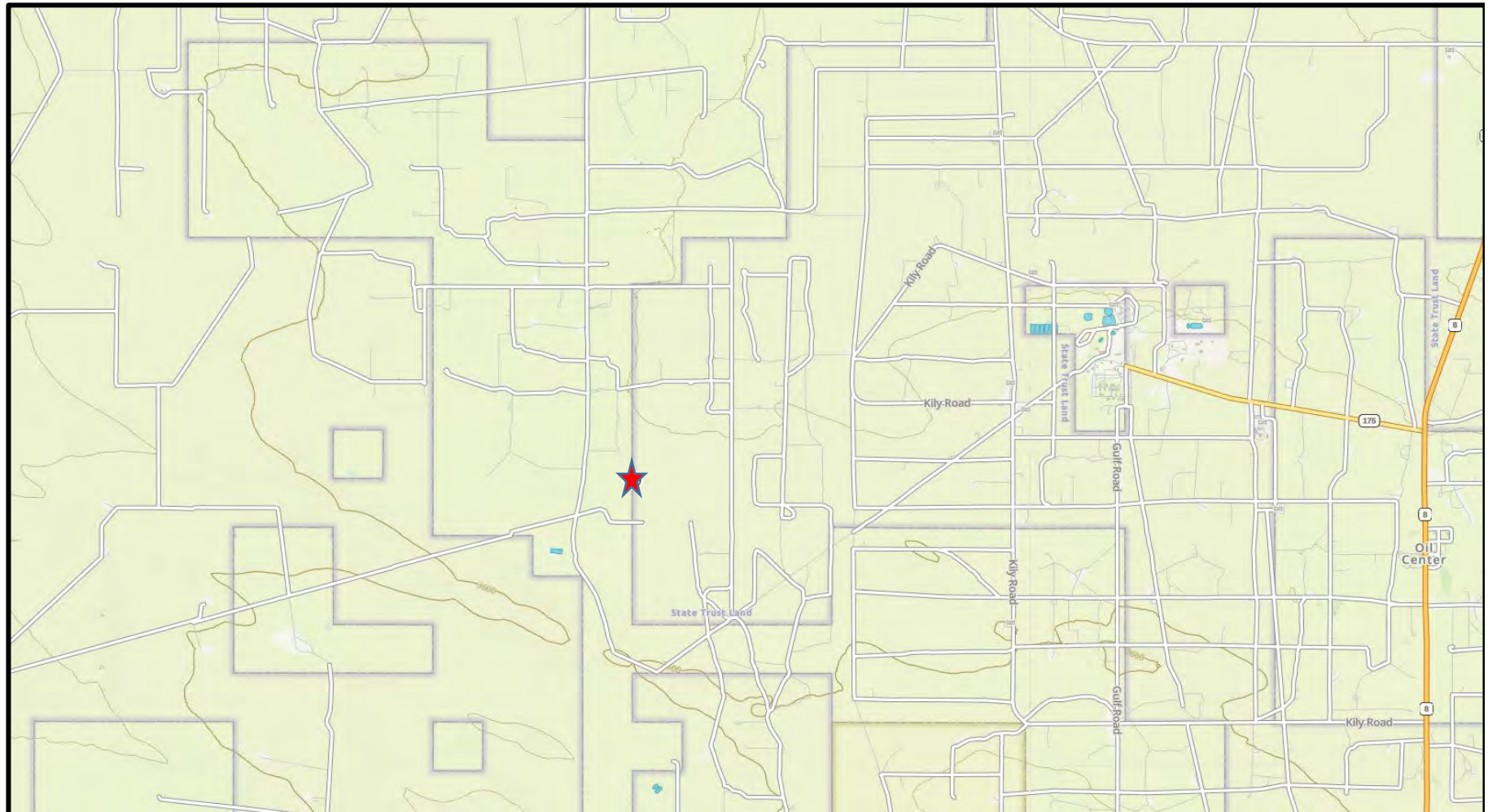
Sample ID	Sample Date	Sample Depth	Soil Status	TPH (GRO)	TPH (DRO)	TPH (MRO)	Total TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Chloride
				milligrams per kilogram (mg/kg)									
NMOCD Closure Criteria							100	10	-	-	-	50	600
DS 01 0.5'	01/22/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	5,360
DS 01 5.0'	01/22/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	5,360
DS 02 0.5'	01/22/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	12,700
DS 02 5.0'	01/22/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	496
DS 03 0.5'	01/22/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,780
DS-03 5'	01/23/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	192
DS 4 0.5'	01/22/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	144
DS 4 5.0'	01/22/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	816
DS 05 0.5'	01/22/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	3,840
DS-05 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
DS-05 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	64.0
DS-06 0.5'	01/23/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	48.0
DS-06 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
DS-06 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	32.0
DS- 07 0.5'	02/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	432
DS-07 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	6,600
DS-07 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	4,720
DS-08 0.5'	02/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	11,300
DS-08 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	4,240
DS-08 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	160
DS-09 0.5'	02/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	8,000
DS-09 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	4,880
DS-09 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	1,840
DS-10 0.5'	02/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	448
DS-10 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	176
DS-10 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	112
DS-11 0.5'	02/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	928
DS-11 2.5'	02/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	4,800
DS-11 5'	02/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	560



Notes:

- 1. GRO: Gasoline Range Organics
- 2. DRO: Diesel Range Organics
- 3. MRO: Motor Oil Range Organics
- 4. -: No NMOCD Closure Criteria established.
- 6. Bold indicates the COC was above the appropriate laboratory method/sample detection limit.
- 7. < indicates the COC was below the appropriate laboratory method/sample detection limit.
- 8. Bold and yellow highlighting indicates the COC was above the appropriate NMOCD Closure Criteria.

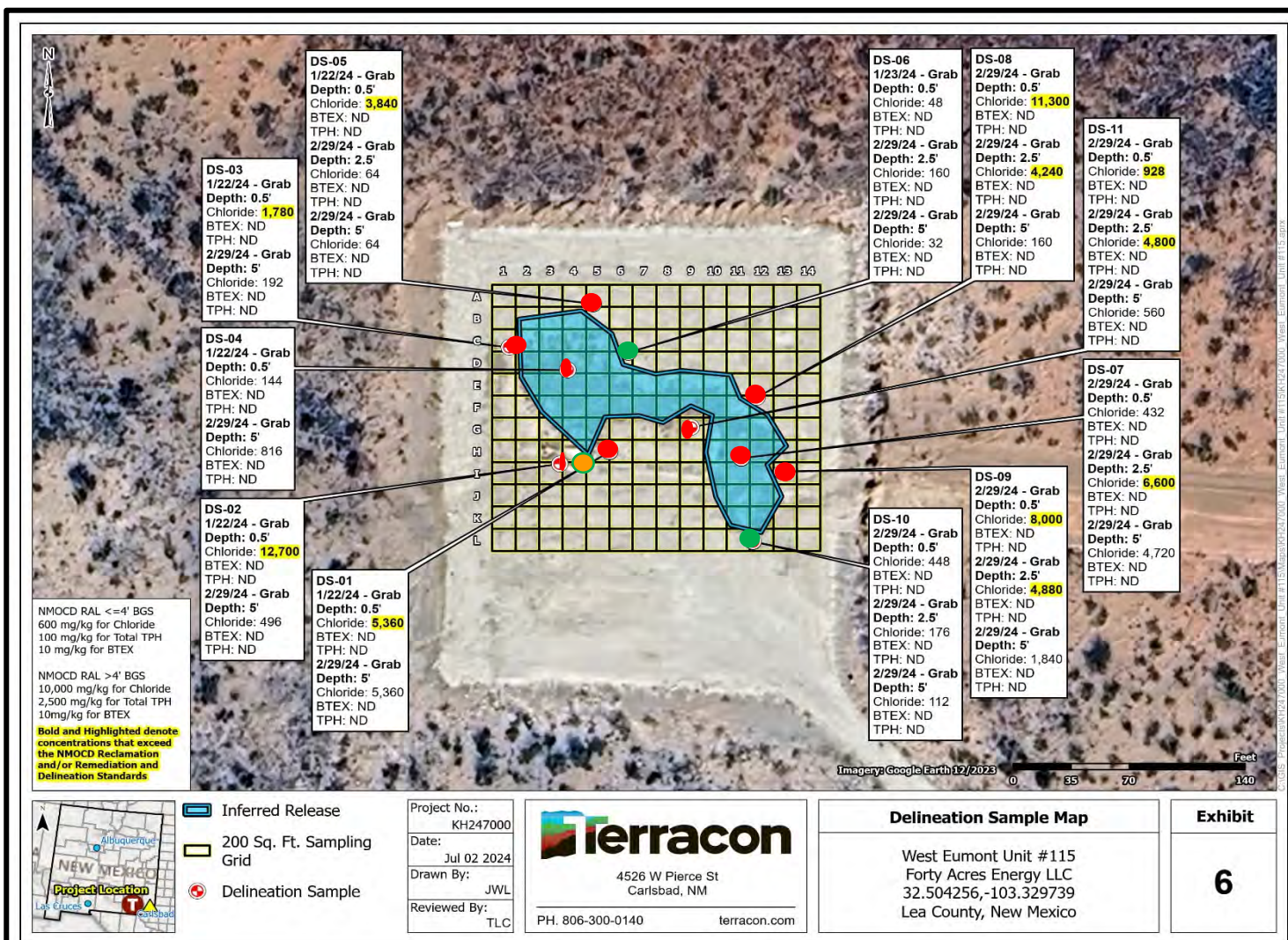


## FIGURES



<b>LEGEND:</b>  Site Location  Base Map From GAIA GPS	<b>Figure 1</b> <b>Site Location Map</b>  Forty Acres Energy, LLC West Eumont Unit #115 Lea County, New Mexico	Drafted by: CC   Checked by: CC	
		Draft: July 13, 2024	
		GPS: 32.504256° -103.329739°	





LEGEND:

- Soil Sample Location With Chloride Concentration (mg/kg). No excavation Needed.
- Soil Sample Location With Chloride Concentration (mg/kg). Additional excavation Needed.
- Release Point
- Inferred Release Boundary
- Highlighting Indicates Concentration Above the Closure Criteria

**Figure 2**  
**Soil Sample Location Map**

Forty Acres Energy, LLC  
West Eumont Unit #115  
Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: July 13, 2024



GPS: 32.504256° -103.329739°

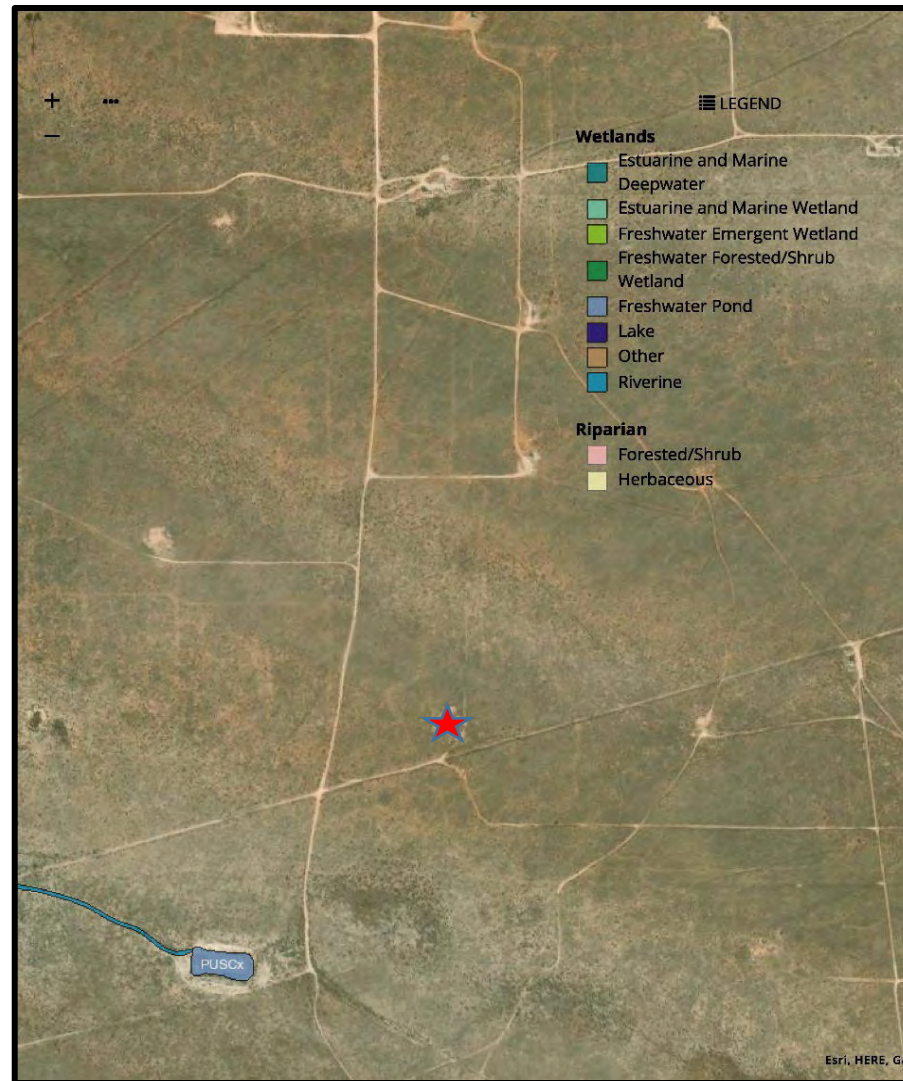
Base Map From Google Earth Pro







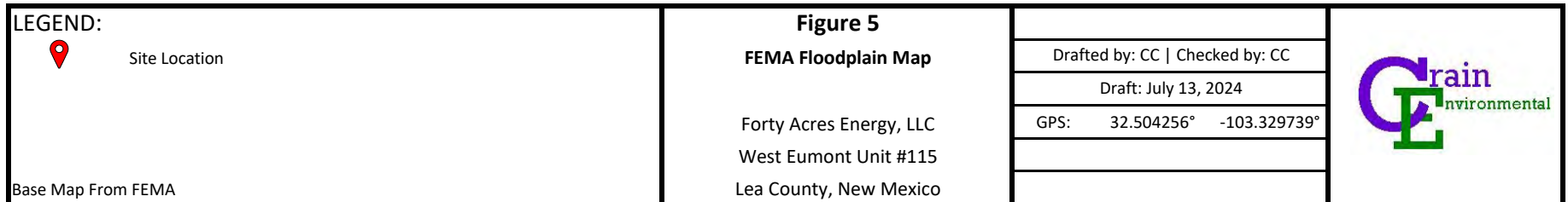


<b>LEGEND:</b>  Site and Well Location  Base Map from Google Earth Pro	<b>Figure 3</b> <b>Wellhead Protection Area Map</b>  Forty Acres Energy, LLC West Eumont Unit #115 Lea County, New Mexico		
		Drafted by: CC   Checked by: CC	
		Draft: July 13, 2024	
		GPS: 32.504256° -103.329739°	

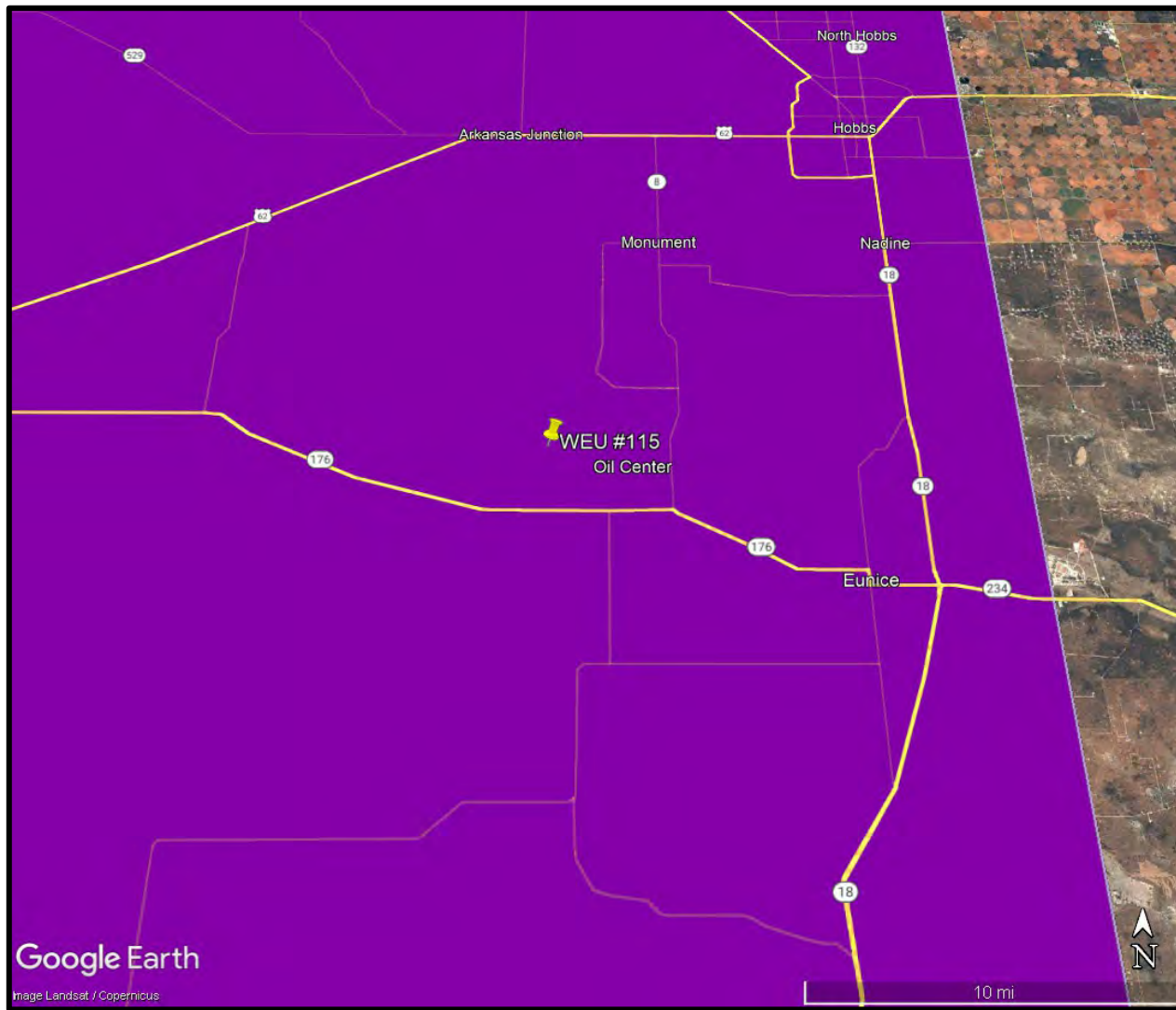



<b>LEGEND:</b>  Site Location  Base Map From US Fish & Wildlife Service	<b>Figure 4</b> <b>National Wetlands Inventory Map</b>  Forty Acres Energy, LLC West Eumont Unit #115 Lea County, New Mexico		
		Drafted by: CC   Checked by: CC	
		Draft: July 13, 2024	
		GPS: 32.504256° -103.329739°	









<p><b>LEGEND:</b></p> <div data-bbox="128 1258 483 1380"> <div>Low Karst Potential</div> <div>Medium Karst Potential</div> <div>High Karst Potential</div> </div> <p>Base Map from Google Earth Pro</p>	<p><b>Figure 6</b></p> <p><b>Karst Potential Map</b></p> <p>Forty Acres Energy, LLC West Eumont Unit #115 Lea County, New Mexico</p>	<p>Drafted by: CC   Checked by: CC</p> <p>Draft: July 13, 2024</p> <p>GPS: 32.504256° -103.329739°</p>	
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**Appendix A: Release Notification and Corrective Action Form  
(NMOCD Form 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 Department  
  
Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

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

Incident ID	NAPP2316654395
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party	Forty Acres Energy	OGRID	371416
Contact Name	Alex Bolanos	Contact Telephone	832-689-3788
Contact email	alex@faenergyus.com	Incident # (assigned by OCD)	nAPP2316654395
Contact mailing address	11757 Katy Fwy Suite 725, Houston, TX 77079		

Location of Release Source

Latitude 32.504256 Longitude -103.329739  
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	West Eumont Unit #115	Site Type	Water Injection Well
Date Release Discovered	5/26/2023	API# (if applicable)	30-025-50031

Unit Letter	Section	Township	Range	County
M	01	21 S	35E	Lea

Surface Owner: ☒ State ☐ Federal ☐ Tribal ☐ Private (Name: State of New Mexico)

Nature and Volume of Release

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

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input checked="" type="checkbox"/> Produced Water	Volume Released (bbls) 15 bbls	Volume Recovered (bbls) 5 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<input type="checkbox"/> Condensate	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

There was a hole in the injection line.

Incident ID	NAPP2316654395
District RP	
Facility ID	
Application ID	

<p>Was this a major release as defined by 19.15.29.7(A) NMAC?</p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>If YES, for what reason(s) does the responsible party consider this a major release?</p>
<p>If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?</p> <p>Yes, Jame Martinez put a call into Mike Bratsher on 5/26/2023.</p>	

## 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>Alex Bolanos</u>	Title: <u>Regulatory &amp; Production Analyst</u>
Signature: <u><i>Alex Bolanos</i></u>	Date: <u>8/29/23</u>
email: <u>alex@faenergyus.com</u>	Telephone: <u>832-689-3788</u>
<b><u>OCD Only</u></b>	
Received by: <u>Shelly Wells</u>	Date: <u>9/1/2023</u>

Released Volume Calculation	
Length	100 feet
Width	5 feet
Thickness	2 cm
	1000
Volume = L*W*T	
Total Released Volume =	1000 gallons (US, dry)
	15.00 bbls

**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 258729

CONDITIONS

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 258729
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	9/1/2023

Incident ID	nAPP2316654395
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>&lt; 50</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.

State of New Mexico  
Oil Conservation Division

Page 4

Incident ID	nAPP2316654395
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: Cindy Crain

Title: Agent for Forty Acres Energy, LLC

Signature: 

Date: 7/14/24

email: cindy.crain@gmail.com

Telephone: (575) 441-7244

**OCD Only**

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

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



Incident ID	nAPP2316654395
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: Cindy CrainTitle: Agent for Forty Acres Energy, LLCSignature: Date: 7/14/24email: cindy.crain@gmail.comTelephone: (575) 441-7244**OCD Only**

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

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

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

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



---

## Appendix B: NMOCD Correspondence

**From:** Velez, Nelson, EMNRD <[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)>  
**Sent:** Wednesday, April 17, 2024 2:48 PM  
**To:** Alex Bolanos <[alex@faenergyus.com](mailto:alex@faenergyus.com)>  
**Cc:** Bratcher, Michael, EMNRD <[mike.bratcher@emnrd.nm.gov](mailto:mike.bratcher@emnrd.nm.gov)>  
**Subject:** Re: [EXTERNAL] Forty Acres Energy C-141 Extension Request

Alex,

Thanks for the correspondence.

Your 90-day time extension request is approved. Remediation Due date updated to July 16, 2024.

Please keep a copy of this communication for inclusion within the appropriate report submittal.

The OCD requires a copy of all correspondence relative to remedial activities be included in all proposals and/or final closure reports. Correspondence required to be included in reports may include, but not limited to, notifications for liner inspections, sample events, spill/release/fire, and request for time extensions or variances.

Regards,

**Nelson Velez** • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | [nelson.velez@emnrd.nm.gov](mailto:nelson.velez@emnrd.nm.gov)

<http://www.emnrd.state.nm.us/OCD/>

---

**From:** Alex Bolanos <[alex@faenergyus.com](mailto:alex@faenergyus.com)>  
**Sent:** Tuesday, April 16, 2024 10:55 AM  
**To:** Velez, Nelson, EMNRD <[Nelson.Velez@emnrd.nm.gov](mailto:Nelson.Velez@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] Forty Acres Energy C-141 Extension Request

**CAUTION:** This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Nelson,

Forty Acres Energy, requests a 90-day extension for the following releases:

1. West Eumont Unit #115 – Inc No: nAPP2316654395
  - Finished sampling last week. Waiting on remediation plan.
2. WEU 114/115 Injection (115C) – Inc No: nAPP2319562381
  - Remediation workplan complete. Starting field work.
3. WEU Central Injection Facility– Inc No: nAPP2316651719
  - Terracon currently working on this location. Characterization Sample testing.
4. WEU Lea 407– Inc No: nAPP2316652967
  - Remediation plan done and going to do work next after 114/115.

If you have any questions or need additional information on these, please let me know.

Thanks, Nelson.

Alex Bolanos

(832) 689-3788



---

## Appendix C: Laboratory Reports and Chain-of-Custody Documentation



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

January 25, 2024

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: WEU 115

Enclosed are the results of analyses for samples received by the laboratory on 01/22/24 16:28.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 01 0.5' (H240280-01)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTX	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	5360	16.0	01/23/2024	ND	416	104	400	10.9	

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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 87.3 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.5 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 01 5.0' (H240280-02)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTEx	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500CI-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	5360	16.0	01/23/2024	ND	416	104	400	10.9		

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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 98.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.8 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 02 0.5' (H240280-03)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTEX	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	12700	16.0	01/23/2024	ND	416	104	400	10.9	

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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 89.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 79.4 % 49.1-148

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\*=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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 02 5.0' (H240280-04)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTX	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 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	496	16.0	01/23/2024	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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 88.0 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 03 0.5' (H240280-05)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTEx	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	1780	16.0	01/23/2024	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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 87.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.2 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 04 0.5' (H240280-06)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTEX	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 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	144	16.0	01/23/2024	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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 87.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 76.4 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 04 5.0' (H240280-07)**

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	01/23/2024	ND	2.10	105	2.00	1.69	
Toluene*	<0.050	0.050	01/23/2024	ND	2.12	106	2.00	1.60	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.14	107	2.00	1.31	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.36	106	6.00	1.24	
Total BTEx	<0.300	0.300	01/23/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 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	01/23/2024	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	01/23/2024	ND	204	102	200	0.362	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	191	95.3	200	2.32	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 94.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.1 % 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: 01/22/2024  
 Reported: 01/25/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/22/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS 05 0.5' (H240280-08)**

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	01/23/2024	ND	2.19	109	2.00	0.141	
Toluene*	<0.050	0.050	01/23/2024	ND	2.21	110	2.00	0.167	
Ethylbenzene*	<0.050	0.050	01/23/2024	ND	2.20	110	2.00	0.176	
Total Xylenes*	<0.150	0.150	01/23/2024	ND	6.66	111	6.00	0.231	
Total BTEX	<0.300	0.300	01/23/2024	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	3840	16.0	01/23/2024	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	01/23/2024	ND	219	109	200	1.09	
DRO >C10-C28*	<10.0	10.0	01/23/2024	ND	209	105	200	4.35	
EXT DRO >C28-C36	<10.0	10.0	01/23/2024	ND					

Surrogate: 1-Chlorooctane 90.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.0 % 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  
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 "C. D. Keene".

Celey D. Keene, Lab Director/Quality Manager






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

### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

[illegible]

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Relinquished By: 		Date: 01-22-24	Received By: 	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: _____
Relinquished By:		Time: 1628		All Results are emailed. Please provide Email address: _____
Relinquished By:		Date:	Received By:	REMARKS: Temp Blank: 2-9: _____
		Time:		Gus.Sanchez@Terracon.com; Travis.Casey@Terracon.com; Joseph.Guesnier@Terracon.com; BeckySue.Miller@Terracon.com;
Delivered By: (Circle One)	Observed Temp. °C 58	Sample Condition Cool Intact	CHECKED BY: 	Turnaround Time: #140 Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>
Sampler - UPS - Bus - Other:	Corrected Temp. °C 58	Yes <input type="checkbox"/> No <input type="checkbox"/>		Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
				Yes <input type="checkbox"/> No <input type="checkbox"/>
				Corrected Temp. °C





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January 26, 2024

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: WEU 115

Enclosed are the results of analyses for samples received by the laboratory on 01/23/24 15:45.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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: 01/23/2024  
 Reported: 01/26/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/23/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Brandi Bautista

**Sample ID: DS - 03 5' (H240305-01)**

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	01/24/2024	ND	2.11	106	2.00	2.82	
Toluene*	<0.050	0.050	01/24/2024	ND	2.13	106	2.00	2.11	
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.14	107	2.00	1.79	
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.37	106	6.00	1.58	
Total BTX	<0.300	0.300	01/24/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	01/24/2024	ND	416	104	400	7.41	

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	01/24/2024	ND	196	98.2	200	0.783	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	208	104	200	2.09	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 83.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 74.0 % 49.1-148

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\*=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: 01/23/2024  
 Reported: 01/26/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 01/23/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Brandi Bautista

**Sample ID: DS - 06 0.5' (H240305-02)**

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	01/24/2024	ND	2.11	106	2.00	2.82		
Toluene*	<0.050	0.050	01/24/2024	ND	2.13	106	2.00	2.11		
Ethylbenzene*	<0.050	0.050	01/24/2024	ND	2.14	107	2.00	1.79		
Total Xylenes*	<0.150	0.150	01/24/2024	ND	6.37	106	6.00	1.58		
Total BTEX	<0.300	0.300	01/24/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: CT						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	01/24/2024	ND	416	104	400	7.41		

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	01/24/2024	ND	197	98.6	200	3.95	
DRO >C10-C28*	<10.0	10.0	01/24/2024	ND	192	96.0	200	0.232	
EXT DRO >C28-C36	<10.0	10.0	01/24/2024	ND					

Surrogate: 1-Chlorooctane 85.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 71.5 % 49.1-148

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Terragon</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: <u>Joseph Guesner</u>				P.O. #:				<u>Handwritten:</u> EPA (500-300-12324) BTEX (80213) PPH (8015)											
Address: <u>4518 W. Pierce St.</u>				Company: <u>FAE II</u>															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Alex Beland</u>															
Phone #: <u>806 507 2057</u> Fax #:				Address: <u>11757 Katy</u>															
Project #: <u>WH247000</u> Project Owner: <u>FAE II</u>				City: <u>Houston</u>															
Project Name: <u>WEU 115</u>				State: <u>TX</u> Zip: <u>77079</u>															
Project Location: <u>Lea</u>				Phone #:															
Sampler Name: <u>Bucky &amp; Gus</u>				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP. # CONTAINERS)		MATRIX		PRESERV.		SAMPLING									
						GROUNDWATER													
						WASTEWATER													
						SOIL													
						OIL													
						SLUDGE													
						OTHER:													
						ACID/BASE:													
						ICE / COOL													
						OTHER:													
						DATE		TIME											
<u>H246305</u>		<u>05-03 5'</u>		<u>61</u>		<u>01/23</u>		<u>12:58</u>		<u>Y</u>									
<u>05-06 0.5'</u>		<u>61</u>		<u>Y</u>		<u>1:13</u>		<u>Y</u>		<u>Y</u>									

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Relinquished By: <u>B. Miller</u>		Date: <u>1-23-24</u>		Received By: <u>Brandi Bautista</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Relinquished By:		Time:		Received By:		All Results are emailed. Please provide Email address:	
Date:		Time:		REMARKS:			
Delivered By: (Circle One)		Observed Temp. °C		Sample Condition		Turnaround Time: <u>Standard</u> <input checked="" type="checkbox"/> <u>Rush</u>	
Sampler - UPS - Bus - Other:		Corrected Temp. °C		Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No		Bacteria (only) Sample Condition	
				CHECKED BY: (Initials) <u>BB</u>		Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	
						Observed Temp. °C	
						Corrected Temp. °C	

FORM-000 R 3.4 07/11/23

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



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

March 05, 2024

JOSEPH GUESNIER

TERRACON CONSULTANTS

5827 50TH ST. SUITE 1

LUBBOCK, TX 79424

RE: WEU 115

Enclosed are the results of analyses for samples received by the laboratory on 02/29/24 13:36.

Cardinal Laboratories is accredited through Texas NELAP under certificate number T104704398-23-16. 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, flowing style.

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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 05 2.5' (H241020-01)****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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTEX	<0.300	0.300	03/01/2024	ND					

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

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

Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.3 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 05 5' (H241020-02)**

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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTEX	<0.300	0.300	03/01/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.8 % 49.1-148

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\*=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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 06 2.5' (H241020-03)**

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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTEX	<0.300	0.300	03/01/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 95.0 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.5 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 06 5' (H241020-04)**

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	03/01/2024	ND	2.22	111	2.00	3.10		
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34		
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22		
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72		
Total BTEx	<0.300	0.300	03/01/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.5 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 07 0.5' (H241020-05)**

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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTEX	<0.300	0.300	03/01/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	432	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 106 % 48.2-134

Surrogate: 1-Chlorooctadecane 95.4 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 07 2.5' (H241020-06)**

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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTEX	<0.300	0.300	03/01/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	6600	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.2 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 07 5' (H241020-07)**

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	03/01/2024	ND	2.22	111	2.00	3.10		
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34		
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22		
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72		
Total BTEX	<0.300	0.300	03/01/2024	ND						

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	4720	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 93.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 85.8 % 49.1-148

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\*=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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 08 0.5' (H241020-08)**

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	03/01/2024	ND	2.22	111	2.00	3.10		
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34		
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22		
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72		
Total BTEx	<0.300	0.300	03/01/2024	ND						

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

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	11300	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 91.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 82.3 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 08 2.5' (H241020-09)**

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	03/01/2024	ND	2.22	111	2.00	3.10	
Toluene*	<0.050	0.050	03/01/2024	ND	2.19	110	2.00	2.34	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.13	107	2.00	2.22	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	6.37	106	6.00	1.72	
Total BTX	<0.300	0.300	03/01/2024	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	4240	16.0	03/04/2024	ND	464	116	400	0.00	QM-07

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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 96.1 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 08 5' (H241020-10)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTX	<0.300	0.300	03/01/2024	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	160	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 94.0 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 09 0.5' (H241020-11)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTEX	<0.300	0.300	03/01/2024	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	8000	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 103 % 48.2-134

Surrogate: 1-Chlorooctadecane 92.8 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 09 2.5' (H241020-12)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTX	<0.300	0.300	03/01/2024	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	4880	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 101 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.5 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 09 5' (H241020-13)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 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	1840	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 96.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 86.9 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 10 0.5' (H241020-14)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTEX	<0.300	0.300	03/01/2024	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	448	16.0	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 99.8 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.9 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 10 2.5' (H241020-15)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTEX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 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	03/04/2024	ND	464	116	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	03/01/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/01/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/01/2024	ND					

Surrogate: 1-Chlorooctane 102 % 48.2-134

Surrogate: 1-Chlorooctadecane 91.6 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 10 5' (H241020-16)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTEX	<0.300	0.300	03/01/2024	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	112	16.0	03/04/2024	ND	464	116	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	03/02/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/02/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/02/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 97.7 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 11 0.5' (H241020-17)**

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	03/01/2024	ND	2.36	118	2.00	0.703		
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40		
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86		
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55		
Total BTEX	<0.300	0.300	03/01/2024	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	928	16.0	03/04/2024	ND	464	116	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	03/02/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/02/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/02/2024	ND					

Surrogate: 1-Chlorooctane 99.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.4 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 11 2.5' (H241020-18)**

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	03/01/2024	ND	2.36	118	2.00	0.703		
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40		
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86		
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55		
Total BTEX	<0.300	0.300	03/01/2024	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	4800	16.0	03/04/2024	ND	464	116	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	03/02/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/02/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/02/2024	ND					

Surrogate: 1-Chlorooctane 99.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.7 % 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: 02/29/2024  
 Reported: 03/05/2024  
 Project Name: WEU 115  
 Project Number: KH247000  
 Project Location: FAE - LEA CO NM

Sampling Date: 02/29/2024  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Shalyn Rodriguez

**Sample ID: DS - 11 5' (H241020-19)**

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	03/01/2024	ND	2.36	118	2.00	0.703	
Toluene*	<0.050	0.050	03/01/2024	ND	2.32	116	2.00	4.40	
Ethylbenzene*	<0.050	0.050	03/01/2024	ND	2.40	120	2.00	6.86	
Total Xylenes*	<0.150	0.150	03/01/2024	ND	7.15	119	6.00	7.55	
Total BTX	<0.300	0.300	03/01/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 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	560	16.0	03/04/2024	ND	464	116	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	03/02/2024	ND	199	99.6	200	0.0854	
DRO >C10-C28*	<10.0	10.0	03/02/2024	ND	191	95.6	200	1.76	
EXT DRO >C28-C36	<10.0	10.0	03/02/2024	ND					

Surrogate: 1-Chlorooctane 94.6 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.8 % 49.1-148

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

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

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

Celey D. Keene, Lab Director/Quality Manager



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

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <u>Terracore</u>				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: <u>Joseph Guesiter</u>				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div>Chloride</div> <div>BTPEX (80213)</div> <div>YPH (8015)</div> </div>											
Address: <u>4518 W Pierce St</u>				Company: <u>FAE II</u>															
City: <u>Carlsbad</u> State: <u>NM</u> Zip: <u>88220</u>				Attn: <u>Alex Bolanos</u>															
Phone #: <u>575 302 5747</u> Fax #:				Address: <u>11757 Katy</u>															
Project #: <u>KH247000</u> Project Owner: <u>FAE II</u>				City: <u>Houston</u>															
Project Name: <u>WEU 115</u>				State: <u>TX</u> Zip:															
Project Location: <u>Zea</u>				Phone #:															
Sampler Name: <u>Bucky Miller</u>				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		GRAB OR (COMP. # CONTAINERS)		MATRIX		PRESERV.		SAMPLING									
						GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		ACID/BASE: ICE / COOL OTHER:		DATE		TIME							
<u>H241020</u>																			
<u>1</u>		<u>DS 05 2.5'</u>		<u>G 1</u>						<u>2/29</u>		<u>10:40</u>							
<u>2</u>		<u>DS 05 5'</u>		<u>G 1</u>								<u>10:35</u>							
<u>3</u>		<u>DS 06 2.5'</u>		<u>G 1</u>								<u>10:48</u>							
<u>4</u>		<u>DS 06 5'</u>		<u>G 1</u>								<u>10:46</u>							
<u>5</u>		<u>DS 07 0.5'</u>		<u>G 1</u>								<u>11:16</u>							
<u>6</u>		<u>DS 07 2.5'</u>		<u>G 1</u>								<u>11:19</u>							
<u>7</u>		<u>DS 07 5'</u>		<u>G 1</u>								<u>11:21</u>							
<u>8</u>		<u>DS 08 0.5'</u>		<u>G 1</u>								<u>10:56</u>							
<u>9</u>		<u>DS 08 2.5'</u>		<u>G 1</u>								<u>11:00</u>							
<u>10</u>		<u>DS 08 5'</u>		<u>G 1</u>								<u>11:01</u>							

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Relinquished By: <u>B Miller</u>		Date: <u>2-29-24</u>	Received By: <u>Spodkiewicz</u>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:	
Time: <u>1330</u>		Time:		All Results are emailed. Please provide Email address:		
Relinquished By:		Date:	Received By:		REMARKS:	
Time:						
Delivered By: (Circle One)		Observed Temp. °C	Sample Condition		CHECKED BY:	
Sampler - UPS - Bus - Other:		Corrected Temp. °C	Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		(Initials) <u>SK</u>	
FORM-000 R 3.4 07/1/23				Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		
				Thermometer ID #140 Correction Factor 0°C		
				Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No Corrected Temp. °C		

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





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### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: <b>Terracore</b> Project Manager: <b>Joseph Guesner</b> Address: <b>4518 W Pierce St</b> City: <b>Coral Gables</b> State: <b>FL</b> Zip: <b>33134</b> Phone #: <b>575 302 5747</b> Fax #: Project #: <b>KH247000</b> Project Owner: <b>FAE II</b> Project Name: <b>WEU 115</b> Project Location: <b>Lea</b> Sampler Name: <b>Bethany Miller</b>				<b>BILL TO</b> P.O. #: Company: <b>FAE II</b> Attn: <b>Alex Boland</b> Address: <b>11757 Katy</b> City: <b>Houston</b> State: <b>TX</b> Zip: Phone #: Fax #: 				<b>ANALYSIS REQUEST</b>															
FOR LAB USE ONLY				MATRIX GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:				PRESERV. ACID/BASE: ICE / COOL OTHER:		SAMPLING DATE TIME		Chloride BTEX (80210) TPH (8015)											
Lab I.D.		Sample I.D.		(GRAB OR (C)OMP. # CONTAINERS		GROUNDWATER WASTEWATER SOIL OIL SLUDGE OTHER:		PRESERV. ACID/BASE: ICE / COOL OTHER:		SAMPLING DATE TIME													
<b>H241020</b>																							
<b>11</b>		<b>DS 09 0.5'</b>		<b>G 1</b>						<b>2/29 11:11</b>													
<b>12</b>		<b>DS 09 2.5'</b>		<b>G 1</b>						<b>11:13</b>													
<b>13</b>		<b>DS 09 0.5'</b>		<b>G 1</b>						<b>11:14</b>													
<b>14</b>		<b>DS 10 0.5'</b>		<b>G 1</b>						<b>11:27</b>													
<b>15</b>		<b>DS 10 2.5'</b>		<b>G 1</b>						<b>11:30</b>													
<b>16</b>		<b>DS 10 5'</b>		<b>G 1</b>						<b>11:32</b>													
<b>17</b>		<b>DS 11 0.5'</b>		<b>G 1</b>						<b>10:50</b>													
<b>18</b>		<b>DS 11 2.5'</b>		<b>G 1</b>						<b>10:52</b>													
<b>19</b>		<b>DS 11 5'</b>		<b>G 1</b>						<b>10:54</b>													
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Relinquished By: <b>B. Miller</b>				Date: <b>2-29-24</b> Time: <b>1336</b>				Received By: <b>S. Rodkinney</b>				Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #: All Results are emailed. Please provide Email address:											
Relinquished By:				Date:				Received By:				REMARKS:											
Delivered By: (Circle One) Sampler - UPS - Bus - Other:				Observed Temp. °C Corrected Temp. °C <b>41.0</b>				Sample Condition Cool Intact <input type="checkbox"/> Yes <input type="checkbox"/> No				CHECKED BY: <b>SJR</b>											
Turnaround Time:				Standard <input checked="" type="checkbox"/> Rush				Bacteria (only) Sample Condition Cool Intact Observed Temp. °C <input type="checkbox"/> Yes <input type="checkbox"/> No				Thermometer ID #140 Correction Factor 0°C											



---

## Appendix D: Photographic Documentation



APPENDIX D  
PHOTOGRAPHIC DOCUMENTATION  
WEST EUMONT UNIT #115



View of release point (5/26/23).



View of release point (5/26/23).

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

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

QUESTIONS  
  
Action 363804

QUESTIONS

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 363804
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2316654395
Incident Name	NAPP2316654395 WEST EUMONT UNIT #115 @ 0
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

Location of Release Source

Please answer all the questions in this group.

Site Name	WEST EUMONT UNIT #115
Date Release Discovered	05/26/2023
Surface Owner	State

Incident Details

Please answer all the questions in this group.

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

Nature and Volume of Release

Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.

Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Other   Other (Specify)   Produced Water   Released: 15 BBL   Recovered: 15 BBL   Lost: 0 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.



**District I**

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Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

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

**District IV**

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

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

QUESTIONS, Page 2

Action 363804

**QUESTIONS (continued)**

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID:
	371416
	Action Number:
	363804
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

**QUESTIONS**

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

**Initial Response**

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

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

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

I hereby agree and sign off to the above statement	Name: Cindy Crain Email: cindy.crain@gmail.com Date: 07/14/2024
--	---

**District I**

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

**District II**

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Phone:(575) 748-1283 Fax:(575) 748-9720

**District III**

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

**District IV**

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

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

QUESTIONS, Page 3

Action 363804

**QUESTIONS (continued)**

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID:
	371416
	Action Number:
	363804
Action Type:	
[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)	

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Greater than 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Greater than 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride	(EPA 300.0 or SM4500 Cl B)	12700
TPH (GRO+DRO+MRO)	(EPA SW-846 Method 8015M)	0
GRO+DRO	(EPA SW-846 Method 8015M)	0
BTEX	(EPA SW-846 Method 8021B or 8260B)	0
Benzene	(EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	09/16/2024
On what date will (or did) the final sampling or liner inspection occur	10/14/2024
On what date will (or was) the remediation complete(d)	11/18/2024
What is the estimated surface area (in square feet) that will be reclaimed	3000
What is the estimated volume (in cubic yards) that will be reclaimed	556
What is the estimated surface area (in square feet) that will be remediated	3000
What is the estimated volume (in cubic yards) that will be remediated	556

These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.

The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

**District I**

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**District II**

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**District III**

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**District IV**

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**Energy, Minerals and Natural Resources**  
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**Santa Fe, NM 87505**

QUESTIONS, Page 4

Action 363804

**QUESTIONS (continued)**

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID:	371416
	Action Number:	363804
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Remediation Plan (continued)</b>	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
<b>This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:</b>	
<i>(Select all answers below that apply.)</i>	
(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	MONUMENT SITE #15 (TNM-94-58) [FAB0000000056]
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Cindy Crain Email: cindy.crain@gmail.com Date: 07/14/2024
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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QUESTIONS, Page 5  
  
Action 363804

QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 363804
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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Action 363804

QUESTIONS (continued)

Operator:  FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID:	371416
	Action Number:	363804
	Action Type:	[C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	{Unavailable.}

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.	
Requesting a remediation closure approval with this submission	No

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CONDITIONS  
  
Action 363804

CONDITIONS

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 363804
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	The remediation plan is approved as written. FAE has 90-days (October 21, 2024) to submit to OCD its appropriate or final remediation closure report.	7/22/2024