Remediation Summary and Closure Report

November 18, 2024

West Eumont Unit #407 Battery
Produced Water Release
Incident No. nAPP2316652967
Lea County, New Mexico

Prepared For:

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

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Cynthia K. Crain, P.G.

Grain Environmental

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1.0 Introduction

Crain Environmental (CE), on behalf of Forty Acres Energy, LLC (FAE), has prepared this *Site Remediation Summary and Closure Report* for the produced water release at West Eumont Unit 407 Battery (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 32.516528, -103.340494. 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 June 14, 2023, a release from a storage tank located at the West Eumont Unit 407 Battery was discovered. As a result of corrosion of the valve, approximately 25 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 tank was repaired. The released fluid covered a surface area of approximately 2,100 square feet. Approximately 25 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 #nAPP2316652967 was assigned. An Initial Form C-141 (Release Notification Report) was submitted on October 23, 2023. Appendix A provides a copy of the C-141.

A *Site Characterization Report and Remediation Workplan* was submitted to the NMOCD on July 16, 2024, and was approved on July 23, 2024, with a Closure Report due by October 22, 2024. On October 14, 2024, FAE requested a 30-day extension on the Closure Report date. On October 15, 2024, the NMOCD approved an extension until November 21, 2024. This Remediation Summary and Closure Report is being submitted in accordance with 19.15.29 New Mexico Administrative Code (NMAC). Appendix B provides a copy of NMOCD correspondence.

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 were no water wells located within 0.5 mile of the Site drilled within the last 25 years; however, FAE provided documentation that well (CP 1975 POD 1) was installed on August 24, 2023, to a depth of 160' below ground surface (bgs) and is located within 0.5 mile of the Site. Groundwater was not encountered in the well, and the well is listed in the table below. Figure 3 provides a 0.5-mile radius circle around the Site and shows the location of well CP-1975 POD 1. The well log is provided in Appendix C. Based on the available water well data, it is estimated that depth to groundwater at the Site is greater than 100 feet bgs.

Nearby Water Wells

Well ID	Location from Release Site	Year Installed	Use	Total Depth / Depth to Water (feet bgs)
CP 1975 POD 1	Approx. 929 feet to North	2023	N/A	160 / DRY

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

At depths greater than 4’ bgs, the Closure Criteria applicable to the Site will be based on the estimated depth to groundwater, which dictates the least stringent Closure Criteria typically associated with groundwater depths of greater than 100 feet bgs. From the surface to a depth of 4’ bgs, the most stringent Closure Criteria will apply. A summary of the Closure Criteria is provided in the table below and in Table 1.

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.

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; however, a water well was drilled to the north (CP-1075) of the Site in 2023 to a depth of 160' bgs, and groundwater was not encountered. Depth to groundwater is estimated be greater than 100' bgs at the Site.

4.3 Wellhead Protection Area

The 0.5-mile wellhead protection area is shown on Figure 3. One water well was drilled within 0.5 mile of the Site in 2023, but the well was dry. 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 Summary of Remediation Activities

Following approval of the *Site Characterization Report and Remediation Workplan* on July 23, 2024, excavation was continued until confirmation samples collected from the bottom and sidewalls of the excavation on August 27 and October 15, 2024, reported total petroleum hydrocarbons (TPH) and chloride concentrations below the NMOCD Closure Criteria.

All confirmation samples were collected pursuant to 19.15.29(D) NMAC, and were placed in clean glass sample jars, properly labeled, immediately placed on ice and hand delivered under proper chain-of-custody control to Eurofins Environment Testing (Eurofins) in Midland, Texas. All samples were analyzed for TPH by Environmental Protection Agency (EPA) SW-846 Method 8015 Modified, and for chlorides by EPA Method 300. As approved in the *Site Characterization Report and Remediation Workplan*, analyses were not conducted for Benzene and BTEX.

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 D. Photographic documentation is provided in Appendix E.

Referring to Table 1, concentrations of TPH and chlorides were reported below the NMOCD Closure Criteria in all samples.

All affected soil has been excavated, and 356 cubic yards (cy) of soil were hauled to J&L Landfarm for disposal between July 24 and October 21, 2024. Waste Manifests are provided in Appendix F.

4.6 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reported in Job Numbers 880-47910-1 and 880-4989901, generated by Eurofins, 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 D.

5.0 Request for Closure

A total of 356 cubic yards of soil was excavated and hauled to disposal at J&L Landfarm between July 24 and October 21, 2024. All confirmation samples collected from the bottom and sidewalls of the excavation reported TPH, Benzene, BTEX, and chloride concentrations below the NMOCD Closure Criteria.

Upon NMOCD approval of this Closure Report, 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 the closure of Incident # nAPP2316652967.

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

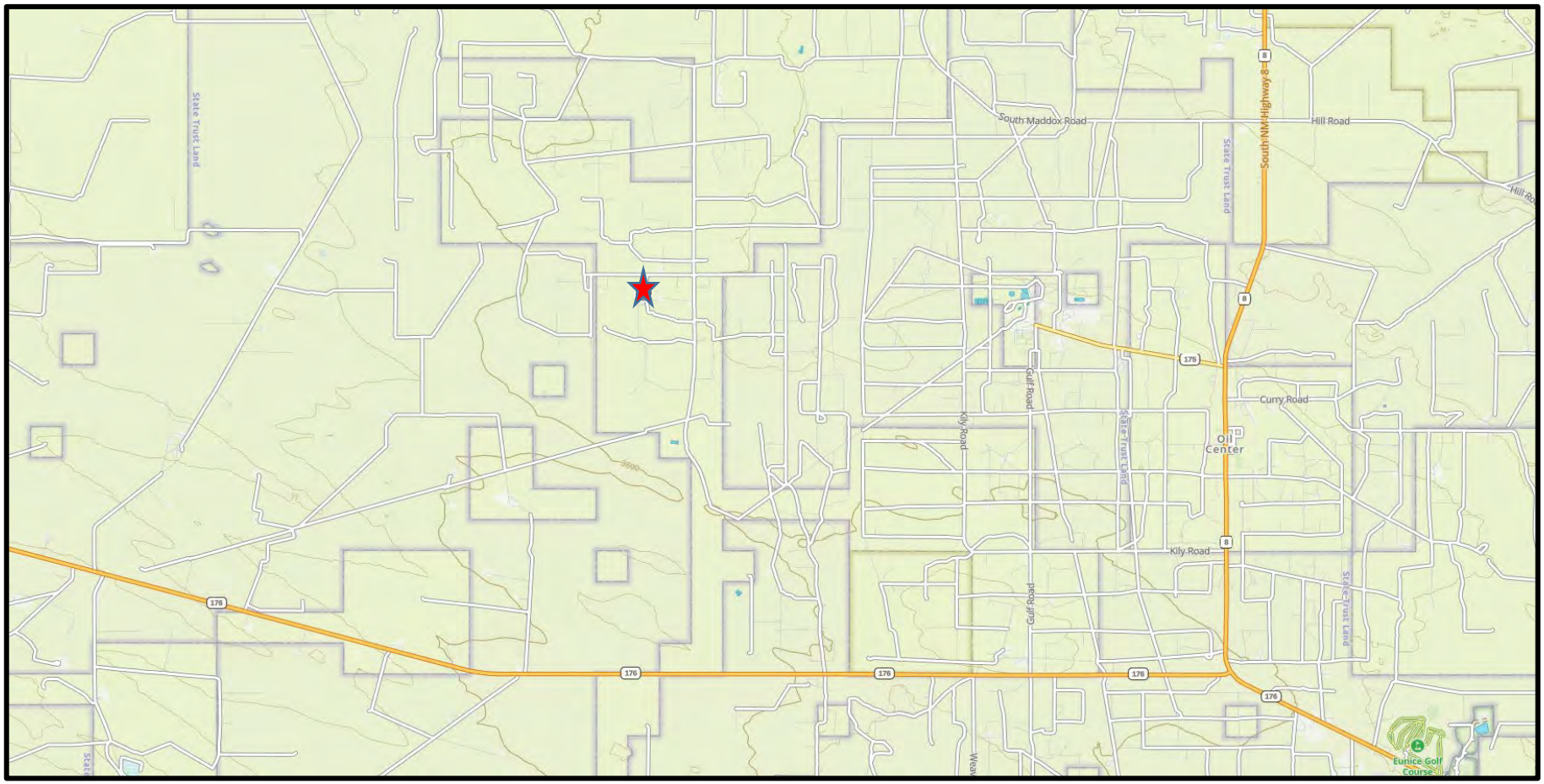
TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
FORTY ACRES ENERGY, LLC
WEST EUMONT UNIT 407 BATTERY
NMOCD INCIDENT # nAPP2316652967

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
NMOCD Closure Criteria (>4' bgs)				GRO + DRO = 1,000		-	2,500	10	-	-	-	50	20,000
DS-01 0.5'	01/24/24	0.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**48.0**
DS-01 5'	01/24/24	5'	Excavated	<10.0	**2,930**	**1,100**	**4,030**	<0.050	<0.050	<0.050	<0.150	<0.300	**144**
DS-01 5.5'	08/27/24	5.5'	In Situ	<49.6	<49.6	<49.6	<49.6	--	--	--	--	--	**1,680**
DS-02 0.5'	01/24/24	0.5'	Excavated	<10.0	**237**	**208**	**445**	<0.050	<0.050	<0.050	<0.150	<0.300	**80.0**
DS-02 5'	01/24/24	5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**480**
DS-02 (0-4')	08/27/24	0-4'	In Situ	<49.8	**87.0**	<49.8	**87.0**	--	--	--	--	--	**279**
DS-03 0.5'	01/24/24	0.5'	Excavated	<10.0	**90.4**	**82.3**	**172.7**	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-03 5'	01/24/24	5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**672**
DS-03 (0-4')	08/27/24	0-4'	In Situ	<49.6	<49.6	<49.6	<49.6	--	--	--	--	--	**82.0**
DS-04 0.5'	01/24/24	0.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**48.0**
DS-04 2.5'	01/29/24	2.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**128**
DS-04 (0-4')	08/27/24	0-4'	In Situ	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	**12.3**
DS-05 0.5'	01/24/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**64.0**
DS-05 2.5'	01/24/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**48.0**
DS-06 0.5'	02/06/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-06 4'	02/06/24	4'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**16.0**
DS- 07 0.5'	01/29/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**16.0**
DS-07 2.5'	01/29/24	2.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**16.0**
DS-07 5'	01/29/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**96.0**
DS-08 0.5'	02/06/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-08 4'	02/06/24	4'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-09 0.5'	01/29/24	0.5'	Excavated	<10.0	**48.2**	**29.1**	**77.3**	<0.050	<0.050	<0.050	<0.150	<0.300	**96.0**
DS-09 2.5'	01/29/24	2.5'	Excavated	<10.0	**1,800**	**964**	**2,764**	<0.050	<0.050	<0.050	<0.150	<0.300	**288**
DS-09 4'	01/29/24	4'	Excavated	<10.0	**1,210**	**729**	**1,939**	<0.050	<0.050	<0.050	<0.150	<0.300	**400**
DS-09 (0- 4')	08/27/24	0-4'	In Situ	<49.7	<49.7	<49.7	<49.7	--	--	--	--	--	**88.9**
DS-10 0.5'	01/29/24	0.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-10 2.5'	01/29/24	2.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**336**
DS-10 3.5'	01/31/24	3.5'	Excavated	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**1,060**
DS-10 (0-4')	08/27/24	0-4'	In Situ	<49.8	<49.8	<49.8	<49.8	--	--	--	--	--	**546**
DS-11 0.5'	01/30/24	0.5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-11 2'	01/30/24	2'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
DS-11 4'	01/30/24	4'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	<16.0
DS-12 3.5'	01/31/24	3.5'	Excavated	<10.0	**117**	<10.0	**117**	<0.050	<0.050	<0.050	<0.150	<0.300	**1,710**
DS-12 4'	02/01/24	4'	Excavated	<10.0	**112**	**15.6**	**127.6**	<0.050	<0.050	<0.050	<0.150	<0.300	**2,720**
DS-12 (4.5')	08/27/24	4.5'	In Situ	<49.8	**1,250**	<49.8	**1,250**	--	--	--	--	--	**1,120**
DS-12 5'	02/01/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**1,810**
DS-13 1.5'	02/01/24	1.5'	Excavated	**11.0**	**2,710**	**1,190**	**3,911**	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-13 2.5'	02/01/24	2.5'	Excavated	<10.0	**1,880**	**555**	**2,435**	<0.050	<0.050	<0.050	<0.150	<0.300	**80.0**
DS-13 (3.5')	08/27/24	3.5'	Excavated	<49.6	**3,600**	<49.6	**3,600**	--	--	--	--	--	**1,840 F1**
DS-13 (4.3')	10/15/24	4.3'	In Situ	<49.7	**59.5**	<49.7	**59.5**	--	--	--	--	--	**874**
DS-13 5'	02/06/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**192**
DS-14 2.5'	02/01/24	2.5'	Excavated	<10.0	**2,070**	**404**	**2,474**	<0.050	<0.050	<0.050	<0.150	<0.300	**32.0**
DS-14 (3.5')	08/27/24	3.5'	Excavated	<50.5	**1,980**	<50.5	**1,980**	--	--	--	--	--	**120**
DS-14 (4.3')	10/15/24	4.3'	In Situ	<49.8	**110**	<49.8	**110**	--	--	--	--	--	**473 F1**
DS-14 5'	02/06/24	5'	In Situ	<10.0	<10.0	<10.0	<10.0	<0.050	<0.050	<0.050	<0.150	<0.300	**656**
DS-15 0.5'	02/01/24	0.5'	In Situ	<10.0	**53.8**	**10.7**	**64.5**	<0.050	<0.050	<0.050	<0.150	<0.300	**16.0**
DS-15 (0-4')	08/27/24	0-4'	In Situ	<50.5	<50.5	<50.5	<50.5	--	--	--	--	--	**53.9**
DS-16 (0-3')	08/27/24	0-3'	In Situ	<50.4	<50.4	<50.4	<50.4	--	--	--	--	--	**84.8**
DS-17 (5.5')	08/27/24	5.5'	In Situ	<50.0	**430 F1**	<50.0	**430**	--	--	--	--	--	**3,300**
DS-18 (5')	08/27/24	5'	In Situ	<49.8	**110**	<49.8	**110**	--	--	--	--	--	**536**

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.
9. Green highlighting and italic font indicates soil was excavated and disposed.
10. F1: MS and/or MSD recovery exceeds control limits.
11. --: Sample was not analyzed for the specified constituent.

FIGURES



LEGEND:

Site Location

Base Map From GAIA GPS

Figure 1

Site Location Map

Forty Acres Energy, LLC

West Eumont Unit 407 Battery

Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: July 15, 2024

GPS: 32.516528° -103.340494°

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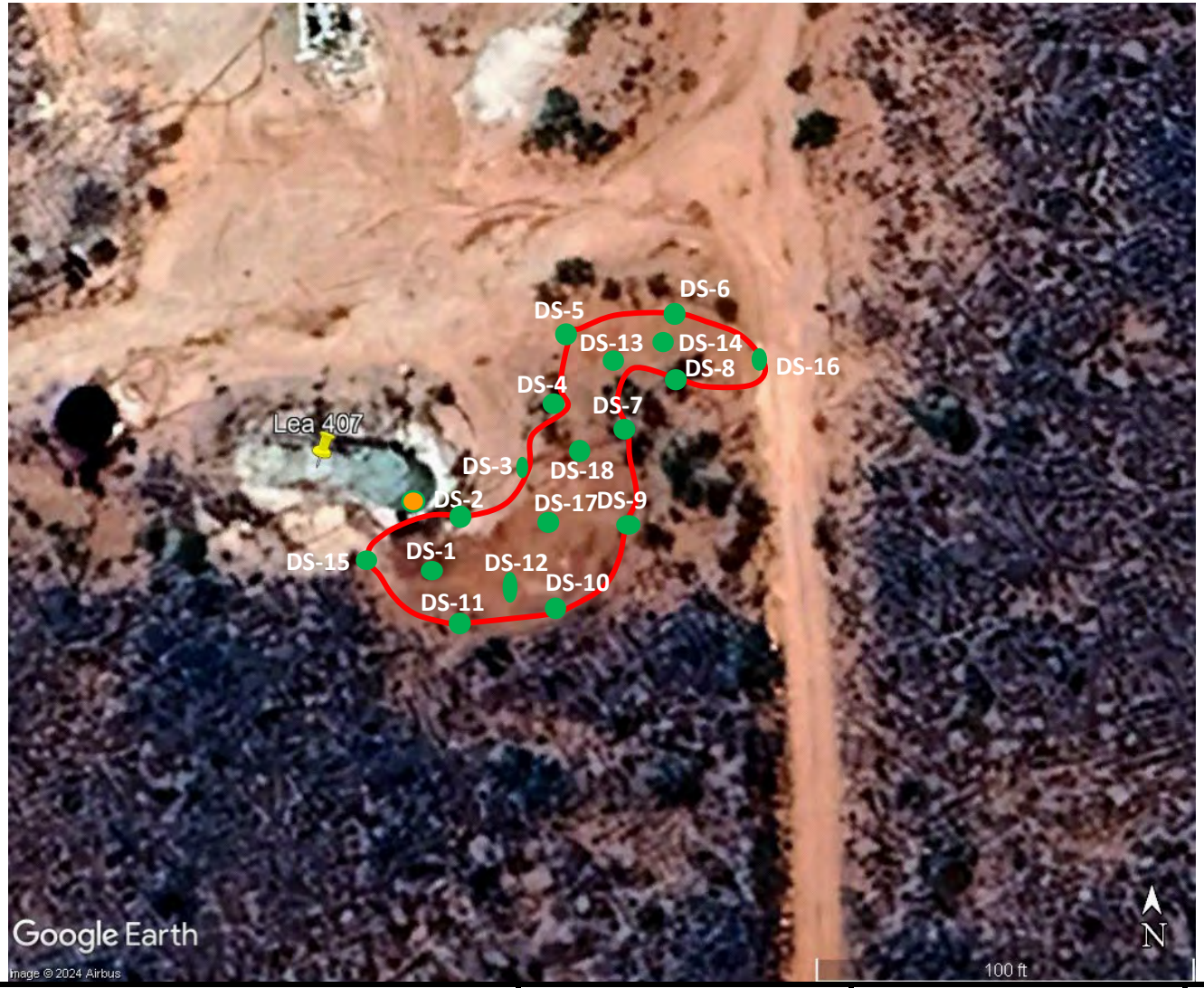

LEGEND:

Soil Sample Location With Chloride Concentration (mg/kg).

Release Point

Excavation Boundary

Figure 2

Soil Sample Location Map

Forty Acres Energy, LLC

West Eumont Unit 407 Battery

Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: Nov. 18, 2024

GPS: 32.516528° -103.340494°

Base Map From Google Earth Pro

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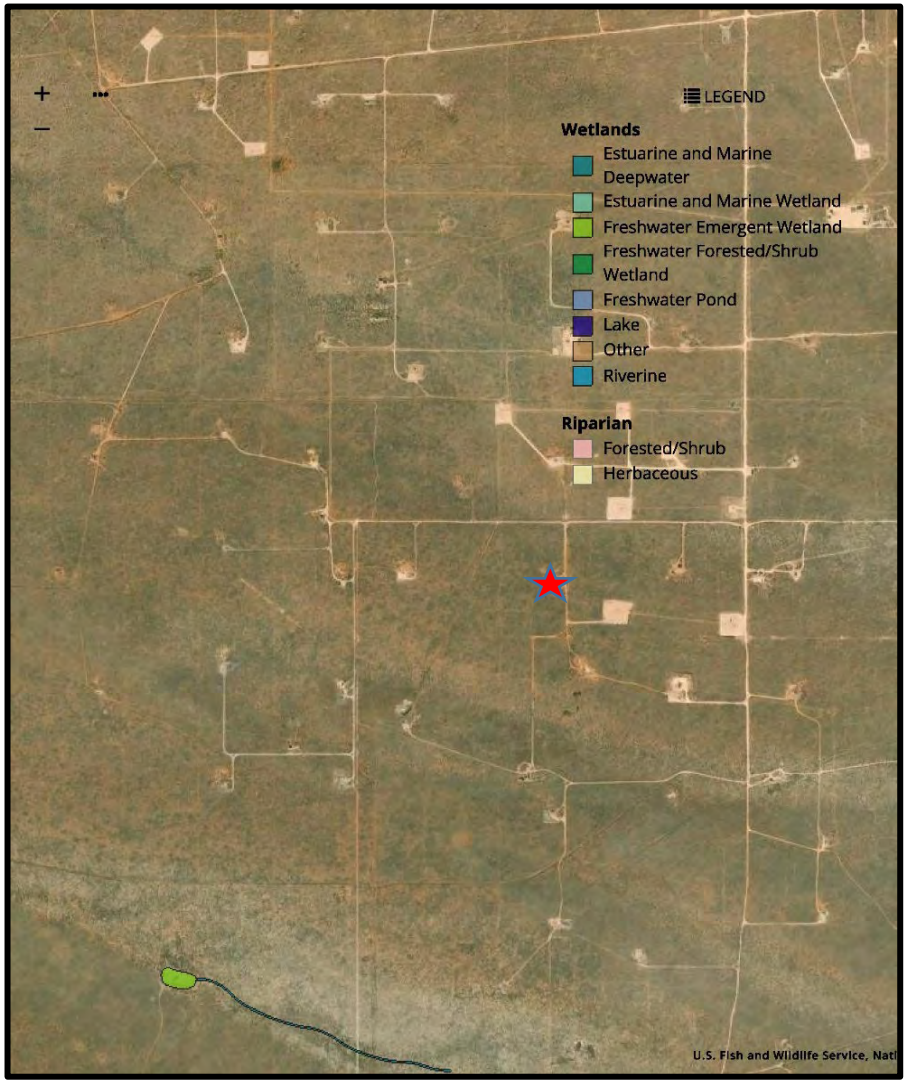
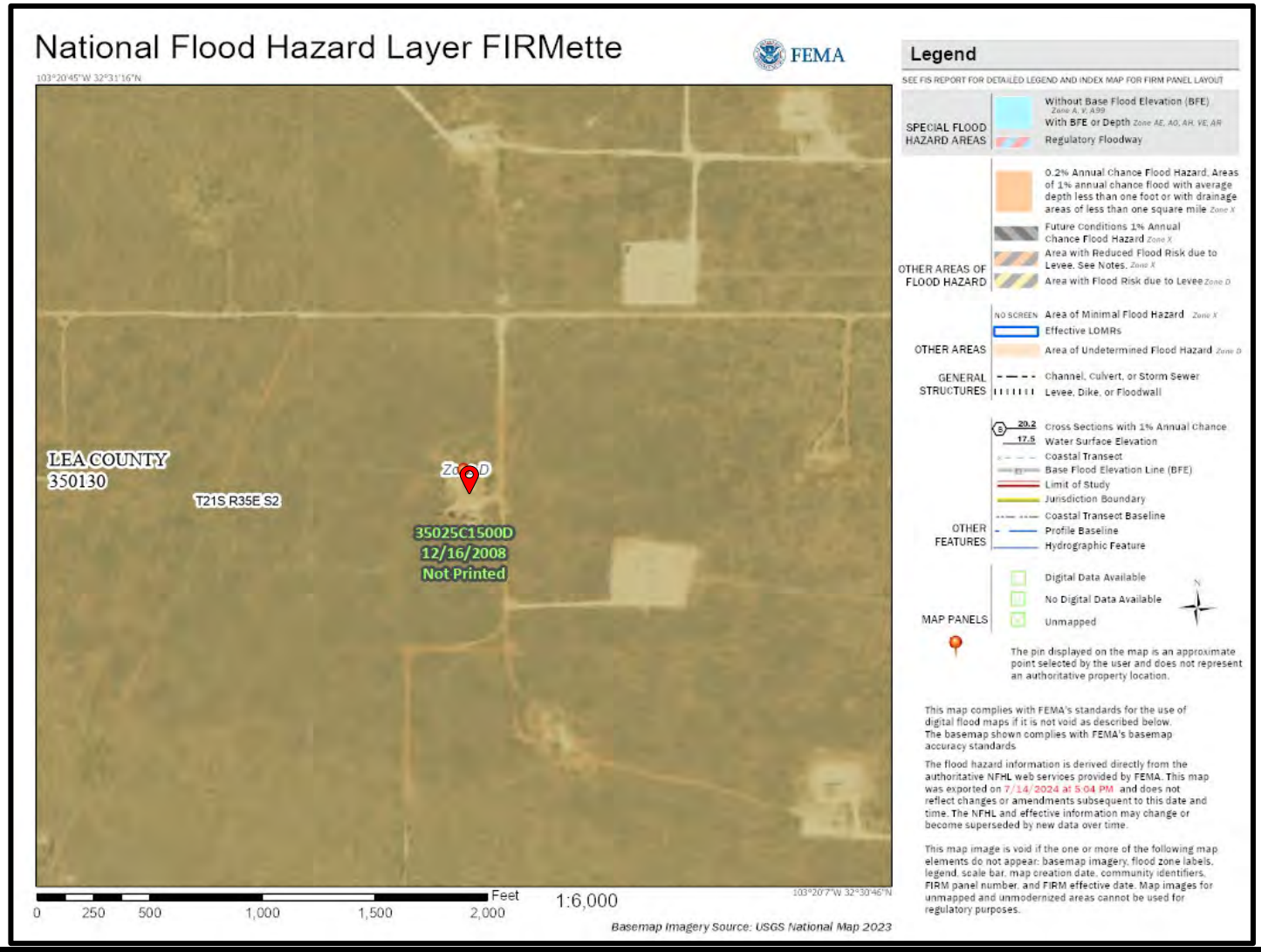
LEGEND: Site and Well Location Base Map from Google Earth Pro	**Figure 3** **Wellhead Protection Area Map** Forty Acres Energy, LLC West Eumont Unit 407 Battery Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: July 15, 2024 GPS: 32.516528° -103.340494°	Grain Environmental



LEGEND: Site Location Base Map From US Fish & Wildlife Service	**Figure 4** **National Wetlands Inventory Map** Forty Acres Energy, LLC West Eumont Unit 407 Battery Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: July 15, 2024 GPS: 32.516528° -103.340494°



LEGEND:

Site Location

Base Map From FEMA

Figure 5

FEMA Floodplain Map

Forty Acres Energy, LLC

West Eumont Unit 407 Battery

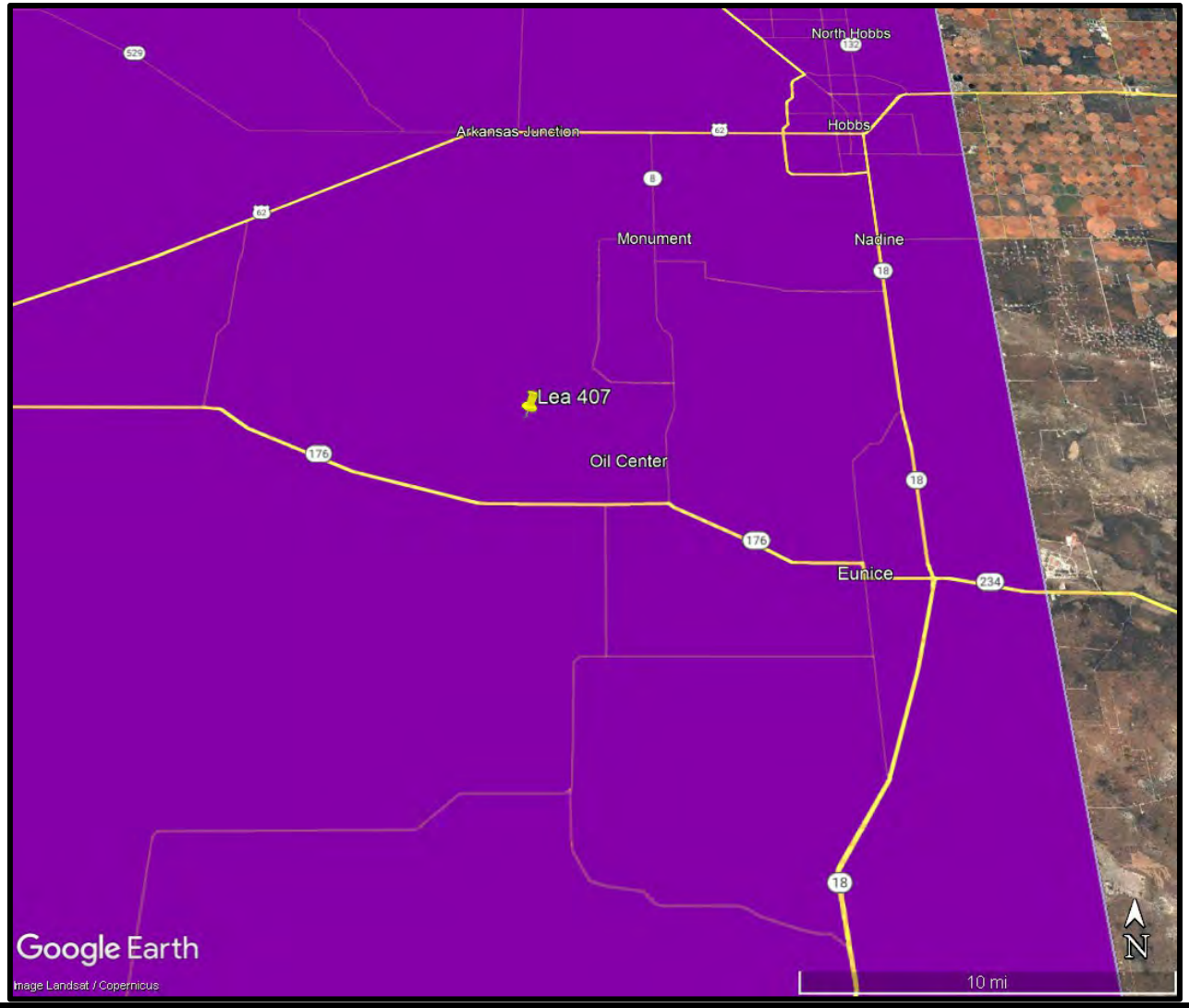
Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: July 15, 2024

GPS: 32.516528° -103.340494°

Grain Environmental



LEGEND:	Figure 6	
Low Karst Potential	**Karst Potential Map**	Drafted by: CC | Checked by: CC
Medium Karst Potential		Draft: July 15, 2024
High Karst Potential	Forty Acres Energy, LLC	GPS: 32.516528° -103.340494°
	West Eumont Unit 407 Battery	
Base Map from Google Earth Pro	Lea County, New Mexico	

Grain Environmental

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	NAPP2316652967
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)*	NAPP2316652967
Contact mailing address	11757 Katy FWY Suite 725, Houston, TX 77079		

Location of Release Source

Latitude 32.516528 Longitude -103.340494
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	West Eumont Unit Lea 407 Battery	Site Type	Battery
Date Release Discovered	6/14/2023	API# *(if applicable)*	

Unit Letter	Section	Township	Range	County
C	02	21 S	35E	Lea

Surface Owner: ☐ State ☐ Federal ☐ Tribal ☒ Private (*Name:* Dale Cooper)

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 25 bbls	Volume Recovered (bbls) 25 bbls
	Is the concentration of dissolved chloride in the produced water >10,000 mg/l?	☒ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

A hole was found in the bottom of a still oil tank.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316652967
District RP	
Facility ID	
Application ID	

Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? The release was over 25 bbls of water, which was contained within the battery containment. Forty Acres has removed the water and soil from location.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, Jame Martinez put a one call into Mike Bratsher on 6/14/2023.	

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.
☒ The impacted area has been secured to protect human health and the environment.
☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: Alex Bolanos
Title: Regulatory & Production Analyst
Signature:
Date: 6/15/2023
email: alex@faenergyus.com
Telephone: 832-689-3788

OCD Only

Received by: Shelly Wells
Date: 10/23/2023

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

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 278261
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	None	10/23/2023

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2316652967
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ 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)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ 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?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

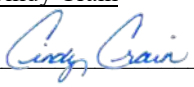
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2316652967
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: 7/16/24

email: cindy.crain@gmail.com Telephone: (575) 441-7244

OCD Only

Received by: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2316652967
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [X] Detailed description of proposed remediation technique
- [X] Scaled sitemap with GPS coordinates showing delineation points
- [X] Estimated volume of material to be remediated
- [X] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [X] 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 Crain Title: Agent for Forty Acres Energy, LLC

Signature: Cindy Crain Date: 7/16/24

email: cindy.crain@gmail.com Telephone: (575) 441-7244

OCD Only

Received by: _____ Date: _____

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____ Date: _____

State of New Mexico
Oil Conservation Division

Incident ID	nAPP2316652967
District RP	
Facility ID	
Application ID	

Closure

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

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

☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC

☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)

☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)

☒ Description of remediation activities

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

Printed Name: Cindy Crain Title: Agent for Forty Acres Energy, LLC

Signature: Cindy Crain Date: 11/18/24

email: cindy.crain@gmail.com Telephone: (575) 441-7244

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Appendix B: NMOCD Correspondence

Gmail

Cindy Crain <cindy.crain@gmail.com>

The Oil Conservation Division (OCD) has approved the application, Application ID: 364538

1 message

OCDOnline@state.nm.us <OCDOnline@state.nm.us> Tue, Jul 23, 2024 at 4:25 PM
To: cindy.crain@gmail.com

To whom it may concern (c/o Cindy Crain for FORTY ACRES ENERGY, LLC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2316652967,
with the following conditions:

- **Remediation plan is approved as written. FAE has 90-days (October 22, 2024) to submit to OCD its appropriate or final remediation closure report.**

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you,
Nelson Velez
Environmental Specialist - Advanced
505-469-6146
Nelson.Velez@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Forty Acres Energy__C-141 Extension Requests

Inbox

Alex Bolanos Oct 14, 2024, 10:35 AM
to Nelson,, Ryan, me

Nelson,

Our environmental consultant is working to finishing up work in the West Eumont Area for Forty Acres. However, we will need a little more time to complete remediation and samplin have closure reports completed on the following dates:

- WEU 410 - nAPP2404472013: October 15, 2024
- WEU 210 - nAPP2404471333: October 21, 2024
- WEU 407 - nAPP2316652967: October 22, 2024
- WEU Injection - nAPP2316651719: October 21, 2024
- WEU 115 - nAPP2316654395: October 21, 2024
- WEU 115C - nAPP2319562381: October 22, 2024
- RR Bell TB - nAPP2405454076: November 4, 2024
- WEU 525 - nAPP2405856306: November 12, 2024

Accordingly, we would like the following extensions in to complete work in this area:

- WEU 410 - nAPP2404472013: 30 days extension
- WEU 210 - nAPP2404471333: 90 days extension
- WEU 407 - nAPP2316652967: 30 days extension
- WEU Injection - nAPP2316651719: 90 days extension
- WEU 115 - nAPP2316654395: 90 days extension
- WEU 115C - nAPP2319562381: 90 days extension
- RR Bell TB - nAPP2405454076: 90 days extension
- WEU 525 - nAPP2405856306: 90 days extension

If you have any questions or need any additional information, please advise.

Thanks,
Alex Bolanos
Forty Acres Energy
alex@faenergyus.com
(832) 689-3788

Velez, Nelson, EMNRD Oct 15, 2024, 4:18 PM
to Alex, Ryan, me

Good afternoon Alex,

Thank you for the correspondence. All eight (8) time extensions had been approved for the time requested (see below).

- WEU 410 - nAPP2404472013: 30 days extension 11/14/2024
- WEU 210 - nAPP2404471333: 90 days extension 01/21/2025
- WEU 407 - nAPP2316652967: 30 days extension 11/21/2024
- WEU Injection - nAPP2316651719: 90 days extension 01/21/2025
- WEU 115 - nAPP2316654395: 90 days extension 01/21/2025
- WEU 115C - nAPP2319562381: 90 days extension 01/21/2025
- RR Bell TB - nAPP2405454076: 90 days extension 02/03/2025
- WEU 525 - nAPP2405856306: 90 days extension 02/10/2025

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

If you have any questions, please contact me via email at your convenience.

Thanks again

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
http://www.emnrd.nm.gov/ocd

Appendix C: Well Records and Logs

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD-1	213A19	CP-1975

WELL OWNER NAME(S)	PHONE (OPTIONAL)
Clay Tom Cooper	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
Box 6	Monument	NM	88265

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	31	09.6	N
	LONGITUDE	103	20	24.7	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND

* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1839	Boyd Coffey	Coffey Drilling

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
8-24-2023	8-24-2023	160	160	NA

COMPLETED WELL IS:	ARTESIAN	DRY HOLE	SHALLOW (UNCONFINED)	STATIC WATER LEVEL IN COMPLETED WELL (FT)
	☐	☑	☐	NA

DRILLING FLUID:	AIR	MUD	ADDITIVES – SPECIFY:
	☐	☑	

DRILLING METHOD:	ROTARY	HAMMER	CABLE TOOL	OTHER – SPECIFY:
	☑	☐	☐	☐

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	20	10	PVC	bell	5	sdr 21	
20	100	8.75	PVC	bell	5	sdr 21	
100	120	8.75	PVC	bell	5	sdr 21	0.020
120	160	8.75	PVC	bell	5	sdr 21	

3. ANNULAR MATERIAL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
0	20	10	3/8 Bentonite hole plug	8	Pour
20	160	8.75	3/8 pea gravel	38	Pour

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 04/30/19)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	6	6	Tan Top soil	Y ✓ N	
6	48	42	White Caliche	Y ✓ N	
48	96	48	Tan Soft SandStone	Y ✓ N	
96	100	4	Red Clay	Y ✓ N	
100	105	5	Course sand and gravel	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☑ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION:

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

6. SIGNATURE

BY SIGNING BELOW, I CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED WELL. I ALSO CERTIFY THAT THE WELL TAG, IF REQUIRED, HAS BEEN INSTALLED AND THAT THIS WELL RECORD WILL ALSO BE FILED WITH THE PERMIT HOLDER WITHIN 30 DAYS AFTER THE COMPLETION OF WELL DRILLING.

SIGNATURE OF DRILLER / PRINT SIGNEE NAME DATE

FOR OSE INTERNAL USE WR-20 WELL RECORD & LOG (Version 04/30/2019)

FILE NO.	POD NO.	TRN NO.	
LOCATION		WELL TAG ID NO.	PAGE 2 OF 2

Grain Environmental

Appendix D: Laboratory Reports and Chain-of-Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Cindy Crain
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761

Generated 9/5/2024 12:21:55 PM

JOB DESCRIPTION

Lea 407
Lea Co., NM

JOB NUMBER

880-47910-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

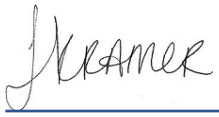
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/5/2024 12:21:55 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Crain Environmental
Project/Site: Lea 407

Laboratory Job ID: 880-47910-1
SDG: Lea Co., NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Crain Environmental
Project: Lea 407

Job ID: 880-47910-1

Job ID: 880-47910-1 Eurofins Midland

Job Narrative
880-47910-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 8/29/2024 3:10 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.5°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: DS-1 (5.5') (880-47910-1), DS-2 (0-4') (880-47910-2), DS-3 (0-4') (880-47910-3), DS-4 (0-4') (880-47910-4), DS-9 (0-4') (880-47910-5), DS-10 (0-4') (880-47910-6), DS-12 (4.5') (880-47910-7), DS-13 (3.5') (880-47910-8), DS-14 (3.5') (880-47910-9), DS-15 (0-4') (880-47910-10), DS-16 (0-3') (880-47910-11), DS-17 (5.5') (880-47910-12) and DS-18 (5') (880-47910-13).

Diesel Range Organics
Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-89728 and analytical batch 880-89778 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-89728/2-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-89728 and analytical batch 880-89778 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-89959 and analytical batch 880-89933 was outside the control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: DS-12 (4.5') (880-47910-7), DS-13 (3.5') (880-47910-8), DS-14 (3.5') (880-47910-9), DS-15 (0-4') (880-47910-10) and (CCV 880-89933/24). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-89729 and analytical batch 880-90076 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-89746 and analytical batch 880-89823 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-89745 and analytical batch 880-89797 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS)

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Case Narrative

Client: Crain Environmental
Project: Lea 407

Job ID: 880-47910-1

Job ID: 880-47910-1 (Continued) Eurofins Midland

recovery is within acceptance limits.

The associated samples are: DS-1 (5.5') (880-47910-1), DS-2 (0-4') (880-47910-2), DS-3 (0-4') (880-47910-3), DS-4 (0-4') (880-47910-4), DS-9 (0-4') (880-47910-5), DS-10 (0-4') (880-47910-6), DS-12 (4.5') (880-47910-7), (880-47909-A-46-A), (880-47909-A-46-B MS) and (880-47909-A-46-C MSD).

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-1 (5.5')

Lab Sample ID: 880-47910-1
Matrix: Solid
Date Collected: 08/27/24 12:20
Date Received: 08/29/24 15:10
Sample Depth: 5.5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/30/24 15:35	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/29/24 17:06	08/30/24 15:35	1
Diesel Range Organics (Over C10-C28)	<49.6	U *+	49.6		mg/Kg		08/29/24 17:06	08/30/24 15:35	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/29/24 17:06	08/30/24 15:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*08/29/24 17:06*	*08/30/24 15:35*	*1*
o-Terphenyl	*93*		*70 - 130*	*08/29/24 17:06*	*08/30/24 15:35*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1680**		24.8		mg/Kg			09/03/24 17:16	5

Client Sample ID: DS-2 (0-4')

Lab Sample ID: 880-47910-2
Matrix: Solid
Date Collected: 08/27/24 12:25
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**87.0**		49.8		mg/Kg			08/30/24 15:52	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/29/24 17:06	08/30/24 15:52	1
Diesel Range Organics (Over C10-C28)	**87.0**	***+**	49.8		mg/Kg		08/29/24 17:06	08/30/24 15:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/29/24 17:06	08/30/24 15:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*08/29/24 17:06*	*08/30/24 15:52*	*1*
o-Terphenyl	*93*		*70 - 130*	*08/29/24 17:06*	*08/30/24 15:52*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**279**		5.05		mg/Kg			09/03/24 17:25	1

Client Sample ID: DS-3 (0-4')

Lab Sample ID: 880-47910-3
Matrix: Solid
Date Collected: 08/27/24 12:30
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			08/30/24 16:09	1

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Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-3 (0-4')

Lab Sample ID: 880-47910-3
Matrix: Solid
Date Collected: 08/27/24 12:30
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		08/29/24 17:06	08/30/24 16:09	1
Diesel Range Organics (Over C10-C28)	<49.6	U *+	49.6		mg/Kg		08/29/24 17:06	08/30/24 16:09	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		08/29/24 17:06	08/30/24 16:09	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:09*	*1*
o-Terphenyl	*88*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:09*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**82.0**		4.98		mg/Kg			09/03/24 17:33	1

Client Sample ID: DS-4 (0-4')

Lab Sample ID: 880-47910-4
Matrix: Solid
Date Collected: 08/27/24 12:35
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			08/30/24 16:25	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/29/24 17:06	08/30/24 16:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		08/29/24 17:06	08/30/24 16:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/29/24 17:06	08/30/24 16:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*98*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:25*	*1*
o-Terphenyl	*84*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**12.3**		4.72		mg/Kg			09/03/24 17:41	1

Client Sample ID: DS-9 (0-4')

Lab Sample ID: 880-47910-5
Matrix: Solid
Date Collected: 08/27/24 12:40
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			08/30/24 16:42	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		08/29/24 17:06	08/30/24 16:42	1

Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-9 (0-4')

Lab Sample ID: 880-47910-5
Matrix: Solid
Date Collected: 08/27/24 12:40
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<49.7	U *+	49.7		mg/Kg		08/29/24 17:06	08/30/24 16:42	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		08/29/24 17:06	08/30/24 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:42*	*1*
o-Terphenyl	*82*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**88.9**		5.02		mg/Kg			09/03/24 17:49	1

Client Sample ID: DS-10 (0-4')

Lab Sample ID: 880-47910-6
Matrix: Solid
Date Collected: 08/27/24 12:45
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			08/30/24 16:59	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/29/24 17:06	08/30/24 16:59	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		08/29/24 17:06	08/30/24 16:59	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/29/24 17:06	08/30/24 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:59*	*1*
o-Terphenyl	*81*		*70 - 130*	*08/29/24 17:06*	*08/30/24 16:59*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**546**		4.99		mg/Kg			09/03/24 17:57	1

Client Sample ID: DS-12 (4.5')

Lab Sample ID: 880-47910-7
Matrix: Solid
Date Collected: 08/27/24 12:50
Date Received: 08/29/24 15:10
Sample Depth: 4.5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1250**		49.8		mg/Kg			09/03/24 15:27	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/03/24 12:21	09/03/24 15:27	1
Diesel Range Organics (Over C10-C28)	**1250**		49.8		mg/Kg		09/03/24 12:21	09/03/24 15:27	1

Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-12 (4.5')

Lab Sample ID: 880-47910-7
Matrix: Solid
Date Collected: 08/27/24 12:50
Date Received: 08/29/24 15:10
Sample Depth: 4.5'

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/03/24 12:21	09/03/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*63*	*S1-*	*70 - 130*	*09/03/24 12:21*	*09/03/24 15:27*	*1*
o-Terphenyl	*74*		*70 - 130*	*09/03/24 12:21*	*09/03/24 15:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1120**		24.8		mg/Kg			09/03/24 18:05	5

Client Sample ID: DS-13 (3.5')

Lab Sample ID: 880-47910-8
Matrix: Solid
Date Collected: 08/27/24 12:55
Date Received: 08/29/24 15:10
Sample Depth: 3.5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3600**		49.6		mg/Kg			09/03/24 15:41	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		09/03/24 12:21	09/03/24 15:41	1
Diesel Range Organics (Over C10-C28)	**3600**		49.6		mg/Kg		09/03/24 12:21	09/03/24 15:41	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/03/24 12:21	09/03/24 15:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*66*	*S1-*	*70 - 130*	*09/03/24 12:21*	*09/03/24 15:41*	*1*
o-Terphenyl	*74*		*70 - 130*	*09/03/24 12:21*	*09/03/24 15:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1840**	**F1**	25.2		mg/Kg			09/03/24 20:30	5

Client Sample ID: DS-14 (3.5')

Lab Sample ID: 880-47910-9
Matrix: Solid
Date Collected: 08/27/24 13:00
Date Received: 08/29/24 15:10
Sample Depth: 3.5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1980**		50.5		mg/Kg			09/03/24 15:57	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/03/24 12:21	09/03/24 15:57	1
Diesel Range Organics (Over C10-C28)	**1980**		50.5		mg/Kg		09/03/24 12:21	09/03/24 15:57	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/03/24 12:21	09/03/24 15:57	1

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Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-14 (3.5')

Lab Sample ID: 880-47910-9
Matrix: Solid
Date Collected: 08/27/24 13:00
Date Received: 08/29/24 15:10
Sample Depth: 3.5'

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*64*	*S1-*	*70 - 130*	*09/03/24 12:21*	*09/03/24 15:57*	*1*
o-Terphenyl	*73*		*70 - 130*	*09/03/24 12:21*	*09/03/24 15:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		5.02		mg/Kg			09/03/24 20:57	1

Client Sample ID: DS-15 (0-4')

Lab Sample ID: 880-47910-10
Matrix: Solid
Date Collected: 08/27/24 13:05
Date Received: 08/29/24 15:10
Sample Depth: 0-4'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5		mg/Kg			09/03/24 16:11	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		09/03/24 12:21	09/03/24 16:11	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		09/03/24 12:21	09/03/24 16:11	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		09/03/24 12:21	09/03/24 16:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*68*	*S1-*	*70 - 130*	*09/03/24 12:21*	*09/03/24 16:11*	*1*
o-Terphenyl	*72*		*70 - 130*	*09/03/24 12:21*	*09/03/24 16:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**53.9**		5.05		mg/Kg			09/03/24 21:06	1

Client Sample ID: DS-16 (0-3')

Lab Sample ID: 880-47910-11
Matrix: Solid
Date Collected: 08/27/24 13:10
Date Received: 08/29/24 15:10
Sample Depth: 0-3'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			09/03/24 16:26	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		09/03/24 12:21	09/03/24 16:26	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		09/03/24 12:21	09/03/24 16:26	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		09/03/24 12:21	09/03/24 16:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*09/03/24 12:21*	*09/03/24 16:26*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/03/24 12:21*	*09/03/24 16:26*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-16 (0-3')

Lab Sample ID: 880-47910-11
Matrix: Solid
Date Collected: 08/27/24 13:10
Date Received: 08/29/24 15:10
Sample Depth: 0-3'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**84.8**		4.98		mg/Kg			09/03/24 21:14	1

Client Sample ID: DS-17 (5.5')

Lab Sample ID: 880-47910-12
Matrix: Solid
Date Collected: 08/27/24 13:15
Date Received: 08/29/24 15:10
Sample Depth: 5.5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**430**		50.0		mg/Kg			09/04/24 16:08	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/29/24 17:09	09/04/24 16:08	1
Diesel Range Organics (Over C10-C28)	**430**	**F1**	50.0		mg/Kg		08/29/24 17:09	09/04/24 16:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/29/24 17:09	09/04/24 16:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*08/29/24 17:09*	*09/04/24 16:08*	*1*
o-Terphenyl	*87*		*70 - 130*	*08/29/24 17:09*	*09/04/24 16:08*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3300**		49.6		mg/Kg			09/03/24 21:23	10

Client Sample ID: DS-18 (5')

Lab Sample ID: 880-47910-13
Matrix: Solid
Date Collected: 08/27/24 13:20
Date Received: 08/29/24 15:10
Sample Depth: 5'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**110**		49.8		mg/Kg			09/04/24 16:55	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		08/29/24 17:09	09/04/24 16:55	1
Diesel Range Organics (Over C10-C28)	**110**		49.8		mg/Kg		08/29/24 17:09	09/04/24 16:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		08/29/24 17:09	09/04/24 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*08/29/24 17:09*	*09/04/24 16:55*	*1*
o-Terphenyl	*93*		*70 - 130*	*08/29/24 17:09*	*09/04/24 16:55*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**536**		25.2		mg/Kg			09/03/24 21:50	5

Surrogate Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-47910-1	DS-1 (5.5')	102	93										
880-47910-2	DS-2 (0-4')	106	93										
880-47910-3	DS-3 (0-4')	100	88										
880-47910-4	DS-4 (0-4')	98	84										
880-47910-5	DS-9 (0-4')	93	82										
880-47910-6	DS-10 (0-4')	93	81										
880-47910-7	DS-12 (4.5')	63 S1-	74										
880-47910-8	DS-13 (3.5')	66 S1-	74										
880-47910-9	DS-14 (3.5')	64 S1-	73										
880-47910-10	DS-15 (0-4')	68 S1-	72										
880-47910-11	DS-16 (0-3')	71	80										
880-47910-12	DS-17 (5.5')	95	87										
880-47910-12 MS	DS-17 (5.5')	98	97										
880-47910-12 MSD	DS-17 (5.5')	101	97										
880-47910-13	DS-18 (5')	104	93										
LCS 880-89728/2-A	Lab Control Sample	132 S1+	127										
LCS 880-89729/2-A	Lab Control Sample	107	110										
LCS 880-89959/2-A	Lab Control Sample	93	105										
LCSD 880-89728/3-A	Lab Control Sample Dup	100	124										
LCSD 880-89729/3-A	Lab Control Sample Dup	106	110										
LCSD 880-89959/3-A	Lab Control Sample Dup	95	102										
MB 880-89728/1-A	Method Blank	145 S1+	134 S1+										
MB 880-89729/1-A	Method Blank	84	80										
MB 880-89959/1-A	Method Blank	66 S1-	74										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-89728/1-A
Matrix: Solid
Analysis Batch: 89778

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89728

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/29/24 17:06	08/30/24 10:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/29/24 17:06	08/30/24 10:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/29/24 17:06	08/30/24 10:23	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*145*	*S1+*	*70 - 130*	*08/29/24 17:06*	*08/30/24 10:23*	*1*
o-Terphenyl	*134*	*S1+*	*70 - 130*	*08/29/24 17:06*	*08/30/24 10:23*	*1*

Lab Sample ID: LCS 880-89728/2-A
Matrix: Solid
Analysis Batch: 89778

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89728

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1143		mg/Kg		114	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1278		mg/Kg		128	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*132*	*S1+*	*70 - 130*
o-Terphenyl	*127*		*70 - 130*

Lab Sample ID: LCSD 880-89728/3-A
Matrix: Solid
Analysis Batch: 89778

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89728

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1122		mg/Kg		112	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	1312	*+	mg/Kg		131	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*100*		*70 - 130*
o-Terphenyl	*124*		*70 - 130*

Lab Sample ID: MB 880-89729/1-A
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89729

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		08/29/24 17:08	09/04/24 13:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		08/29/24 17:08	09/04/24 13:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/29/24 17:08	09/04/24 13:59	1

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-89729/1-A
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89729

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	08/29/24 17:08	09/04/24 13:59	1
o-Terphenyl	80		70 - 130	08/29/24 17:08	09/04/24 13:59	1

Lab Sample ID: LCS 880-89729/2-A
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89729

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1160		mg/Kg		116	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1051		mg/Kg		105	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-89729/3-A
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89729

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1146		mg/Kg		115	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	1055		mg/Kg		106	70 - 130	0	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: 880-47910-12 MS
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: DS-17 (5.5')
Prep Type: Total/NA
Prep Batch: 89729

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	994	952.5		mg/Kg		96	70 - 130		
Diesel Range Organics (Over C10-C28)	430	F1	994	876.3	F1	mg/Kg		45	70 - 130		

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	98		70 - 130
o-Terphenyl	97		70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-47910-12 MSD
Matrix: Solid
Analysis Batch: 90076

Client Sample ID: DS-17 (5.5')
Prep Type: Total/NA
Prep Batch: 89729

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	994	999.9		mg/Kg		101	70 - 130	5	20
Diesel Range Organics (Over C10-C28)	430	F1	994	894.9	F1	mg/Kg		47	70 - 130	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*97*		*70 - 130*

Lab Sample ID: MB 880-89959/1-A
Matrix: Solid
Analysis Batch: 89933

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 89959

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/03/24 08:00	09/03/24 09:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/03/24 08:00	09/03/24 09:37	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/03/24 08:00	09/03/24 09:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*66*	*S1-*	*70 - 130*	*09/03/24 08:00*	*09/03/24 09:37*	*1*
o-Terphenyl	*74*		*70 - 130*	*09/03/24 08:00*	*09/03/24 09:37*	*1*

Lab Sample ID: LCS 880-89959/2-A
Matrix: Solid
Analysis Batch: 89933

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 89959

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	863.4		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1029		mg/Kg		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*105*		*70 - 130*

Lab Sample ID: LCSD 880-89959/3-A
Matrix: Solid
Analysis Batch: 89933

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89959

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	920.5		mg/Kg		92	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1041		mg/Kg		104	70 - 130	1	20

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-89959/3-A
Matrix: Solid
Analysis Batch: 89933

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 89959

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	102		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-89745/1-A
Matrix: Solid
Analysis Batch: 89797

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/03/24 14:01	1

Lab Sample ID: LCS 880-89745/2-A
Matrix: Solid
Analysis Batch: 89797

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	244.5		mg/Kg		98	90 - 110

Lab Sample ID: LCSD 880-89745/3-A
Matrix: Solid
Analysis Batch: 89797

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	244.7		mg/Kg		98	90 - 110	0	20

Lab Sample ID: MB 880-89746/1-A
Matrix: Solid
Analysis Batch: 89823

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			09/03/24 20:04	1

Lab Sample ID: LCS 880-89746/2-A
Matrix: Solid
Analysis Batch: 89823

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	246.3		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-89746/3-A
Matrix: Solid
Analysis Batch: 89823

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	246.8		mg/Kg		99	90 - 110	0	20

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-47910-8 MS
Matrix: Solid
Analysis Batch: 89823

Client Sample ID: DS-13 (3.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1840	F1	1260	3646	F1	mg/Kg		144	90 - 110

Lab Sample ID: 880-47910-8 MSD
Matrix: Solid
Analysis Batch: 89823

Client Sample ID: DS-13 (3.5')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1840	F1	1260	3647	F1	mg/Kg		144	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

GC Semi VOA

Prep Batch: 89728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-1	DS-1 (5.5')	Total/NA	Solid	8015NM Prep	
880-47910-2	DS-2 (0-4')	Total/NA	Solid	8015NM Prep	
880-47910-3	DS-3 (0-4')	Total/NA	Solid	8015NM Prep	
880-47910-4	DS-4 (0-4')	Total/NA	Solid	8015NM Prep	
880-47910-5	DS-9 (0-4')	Total/NA	Solid	8015NM Prep	
880-47910-6	DS-10 (0-4')	Total/NA	Solid	8015NM Prep	
MB 880-89728/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-89728/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-89728/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 89729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-12	DS-17 (5.5')	Total/NA	Solid	8015NM Prep	
880-47910-13	DS-18 (5')	Total/NA	Solid	8015NM Prep	
MB 880-89729/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-89729/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-89729/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-47910-12 MS	DS-17 (5.5')	Total/NA	Solid	8015NM Prep	
880-47910-12 MSD	DS-17 (5.5')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 89778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-1	DS-1 (5.5')	Total/NA	Solid	8015B NM	89728
880-47910-2	DS-2 (0-4')	Total/NA	Solid	8015B NM	89728
880-47910-3	DS-3 (0-4')	Total/NA	Solid	8015B NM	89728
880-47910-4	DS-4 (0-4')	Total/NA	Solid	8015B NM	89728
880-47910-5	DS-9 (0-4')	Total/NA	Solid	8015B NM	89728
880-47910-6	DS-10 (0-4')	Total/NA	Solid	8015B NM	89728
MB 880-89728/1-A	Method Blank	Total/NA	Solid	8015B NM	89728
LCS 880-89728/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	89728
LCSD 880-89728/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	89728

Analysis Batch: 89933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-7	DS-12 (4.5')	Total/NA	Solid	8015B NM	89959
880-47910-8	DS-13 (3.5')	Total/NA	Solid	8015B NM	89959
880-47910-9	DS-14 (3.5')	Total/NA	Solid	8015B NM	89959
880-47910-10	DS-15 (0-4')	Total/NA	Solid	8015B NM	89959
880-47910-11	DS-16 (0-3')	Total/NA	Solid	8015B NM	89959
MB 880-89959/1-A	Method Blank	Total/NA	Solid	8015B NM	89959
LCS 880-89959/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	89959
LCSD 880-89959/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	89959

Prep Batch: 89959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-7	DS-12 (4.5')	Total/NA	Solid	8015NM Prep	
880-47910-8	DS-13 (3.5')	Total/NA	Solid	8015NM Prep	
880-47910-9	DS-14 (3.5')	Total/NA	Solid	8015NM Prep	
880-47910-10	DS-15 (0-4')	Total/NA	Solid	8015NM Prep	
880-47910-11	DS-16 (0-3')	Total/NA	Solid	8015NM Prep	
MB 880-89959/1-A	Method Blank	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

GC Semi VOA (Continued)

Prep Batch: 89959 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-89959/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-89959/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 90059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-1	DS-1 (5.5')	Total/NA	Solid	8015 NM	
880-47910-2	DS-2 (0-4')	Total/NA	Solid	8015 NM	
880-47910-3	DS-3 (0-4')	Total/NA	Solid	8015 NM	
880-47910-4	DS-4 (0-4')	Total/NA	Solid	8015 NM	
880-47910-5	DS-9 (0-4')	Total/NA	Solid	8015 NM	
880-47910-6	DS-10 (0-4')	Total/NA	Solid	8015 NM	
880-47910-7	DS-12 (4.5')	Total/NA	Solid	8015 NM	
880-47910-8	DS-13 (3.5')	Total/NA	Solid	8015 NM	
880-47910-9	DS-14 (3.5')	Total/NA	Solid	8015 NM	
880-47910-10	DS-15 (0-4')	Total/NA	Solid	8015 NM	
880-47910-11	DS-16 (0-3')	Total/NA	Solid	8015 NM	
880-47910-12	DS-17 (5.5')	Total/NA	Solid	8015 NM	
880-47910-13	DS-18 (5')	Total/NA	Solid	8015 NM	

Analysis Batch: 90076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-12	DS-17 (5.5')	Total/NA	Solid	8015B NM	89729
880-47910-13	DS-18 (5')	Total/NA	Solid	8015B NM	89729
MB 880-89729/1-A	Method Blank	Total/NA	Solid	8015B NM	89729
LCS 880-89729/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	89729
LCSD 880-89729/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	89729
880-47910-12 MS	DS-17 (5.5')	Total/NA	Solid	8015B NM	89729
880-47910-12 MSD	DS-17 (5.5')	Total/NA	Solid	8015B NM	89729

HPLC/IC

Leach Batch: 89745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-1	DS-1 (5.5')	Soluble	Solid	DI Leach	
880-47910-2	DS-2 (0-4')	Soluble	Solid	DI Leach	
880-47910-3	DS-3 (0-4')	Soluble	Solid	DI Leach	
880-47910-4	DS-4 (0-4')	Soluble	Solid	DI Leach	
880-47910-5	DS-9 (0-4')	Soluble	Solid	DI Leach	
880-47910-6	DS-10 (0-4')	Soluble	Solid	DI Leach	
880-47910-7	DS-12 (4.5')	Soluble	Solid	DI Leach	
MB 880-89745/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-89745/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-89745/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Leach Batch: 89746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-8	DS-13 (3.5')	Soluble	Solid	DI Leach	
880-47910-9	DS-14 (3.5')	Soluble	Solid	DI Leach	
880-47910-10	DS-15 (0-4')	Soluble	Solid	DI Leach	
880-47910-11	DS-16 (0-3')	Soluble	Solid	DI Leach	
880-47910-12	DS-17 (5.5')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Leach Batch: 89746 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-13	DS-18 (5')	Soluble	Solid	DI Leach	
MB 880-89746/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-89746/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-89746/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-47910-8 MS	DS-13 (3.5')	Soluble	Solid	DI Leach	
880-47910-8 MSD	DS-13 (3.5')	Soluble	Solid	DI Leach	

Analysis Batch: 89797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-1	DS-1 (5.5')	Soluble	Solid	300.0	89745
880-47910-2	DS-2 (0-4')	Soluble	Solid	300.0	89745
880-47910-3	DS-3 (0-4')	Soluble	Solid	300.0	89745
880-47910-4	DS-4 (0-4')	Soluble	Solid	300.0	89745
880-47910-5	DS-9 (0-4')	Soluble	Solid	300.0	89745
880-47910-6	DS-10 (0-4')	Soluble	Solid	300.0	89745
880-47910-7	DS-12 (4.5')	Soluble	Solid	300.0	89745
MB 880-89745/1-A	Method Blank	Soluble	Solid	300.0	89745
LCS 880-89745/2-A	Lab Control Sample	Soluble	Solid	300.0	89745
LCSD 880-89745/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	89745

Analysis Batch: 89823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47910-8	DS-13 (3.5')	Soluble	Solid	300.0	89746
880-47910-9	DS-14 (3.5')	Soluble	Solid	300.0	89746
880-47910-10	DS-15 (0-4')	Soluble	Solid	300.0	89746
880-47910-11	DS-16 (0-3')	Soluble	Solid	300.0	89746
880-47910-12	DS-17 (5.5')	Soluble	Solid	300.0	89746
880-47910-13	DS-18 (5')	Soluble	Solid	300.0	89746
MB 880-89746/1-A	Method Blank	Soluble	Solid	300.0	89746
LCS 880-89746/2-A	Lab Control Sample	Soluble	Solid	300.0	89746
LCSD 880-89746/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	89746
880-47910-8 MS	DS-13 (3.5')	Soluble	Solid	300.0	89746
880-47910-8 MSD	DS-13 (3.5')	Soluble	Solid	300.0	89746

Lab Chronicle

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-1 (5.5')

Lab Sample ID: 880-47910-1
Matrix: Solid
Date Collected: 08/27/24 12:20
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 15:35	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 15:35	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	89797	09/03/24 17:16	SMC	EET MID

Client Sample ID: DS-2 (0-4')

Lab Sample ID: 880-47910-2
Matrix: Solid
Date Collected: 08/27/24 12:25
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 15:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 15:52	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89797	09/03/24 17:25	SMC	EET MID

Client Sample ID: DS-3 (0-4')

Lab Sample ID: 880-47910-3
Matrix: Solid
Date Collected: 08/27/24 12:30
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 16:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 16:09	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89797	09/03/24 17:33	SMC	EET MID

Client Sample ID: DS-4 (0-4')

Lab Sample ID: 880-47910-4
Matrix: Solid
Date Collected: 08/27/24 12:35
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 16:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 16:25	TKC	EET MID
Soluble	Leach	DI Leach			5.30 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89797	09/03/24 17:41	SMC	EET MID

Client Sample ID: DS-9 (0-4')

Lab Sample ID: 880-47910-5
Matrix: Solid
Date Collected: 08/27/24 12:40
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 16:42	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-9 (0-4')

Lab Sample ID: 880-47910-5
Matrix: Solid
Date Collected: 08/27/24 12:40
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 16:42	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89797	09/03/24 17:49	SMC	EET MID

Client Sample ID: DS-10 (0-4')

Lab Sample ID: 880-47910-6
Matrix: Solid
Date Collected: 08/27/24 12:45
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	08/30/24 16:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	89728	08/29/24 17:06	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89778	08/30/24 16:59	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89797	09/03/24 17:57	SMC	EET MID

Client Sample ID: DS-12 (4.5')

Lab Sample ID: 880-47910-7
Matrix: Solid
Date Collected: 08/27/24 12:50
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/03/24 15:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	89959	09/03/24 12:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89933	09/03/24 15:27	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	89745	08/30/24 08:01	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	89797	09/03/24 18:05	SMC	EET MID

Client Sample ID: DS-13 (3.5')

Lab Sample ID: 880-47910-8
Matrix: Solid
Date Collected: 08/27/24 12:55
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/03/24 15:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	89959	09/03/24 12:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89933	09/03/24 15:41	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	89823	09/03/24 20:30	SI	EET MID

Client Sample ID: DS-14 (3.5')

Lab Sample ID: 880-47910-9
Matrix: Solid
Date Collected: 08/27/24 13:00
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/03/24 15:57	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-14 (3.5')
Lab Sample ID: 880-47910-9
Date Collected: 08/27/24 13:00
Matrix: Solid
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	89959	09/03/24 12:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89933	09/03/24 15:57	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89823	09/03/24 20:57	SI	EET MID

Client Sample ID: DS-15 (0-4')
Lab Sample ID: 880-47910-10
Date Collected: 08/27/24 13:05
Matrix: Solid
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/03/24 16:11	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	89959	09/03/24 12:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89933	09/03/24 16:11	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89823	09/03/24 21:06	SI	EET MID

Client Sample ID: DS-16 (0-3')
Lab Sample ID: 880-47910-11
Date Collected: 08/27/24 13:10
Matrix: Solid
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/03/24 16:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	89959	09/03/24 12:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	89933	09/03/24 16:26	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	89823	09/03/24 21:14	SI	EET MID

Client Sample ID: DS-17 (5.5')
Lab Sample ID: 880-47910-12
Date Collected: 08/27/24 13:15
Matrix: Solid
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/04/24 16:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	89729	08/29/24 17:09	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90076	09/04/24 16:08	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	89823	09/03/24 21:23	SI	EET MID

Client Sample ID: DS-18 (5')
Lab Sample ID: 880-47910-13
Date Collected: 08/27/24 13:20
Matrix: Solid
Date Received: 08/29/24 15:10

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			90059	09/04/24 16:55	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Client Sample ID: DS-18 (5')

Date Collected: 08/27/24 13:20
Date Received: 08/29/24 15:10

Lab Sample ID: 880-47910-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	89729	08/29/24 17:09	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	90076	09/04/24 16:55	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	89746	08/30/24 08:04	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	89823	09/03/24 21:50	SI	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-47910-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-47910-1	DS-1 (5.5')	Solid	08/27/24 12:20	08/29/24 15:10	5.5'
880-47910-2	DS-2 (0-4')	Solid	08/27/24 12:25	08/29/24 15:10	0-4'
880-47910-3	DS-3 (0-4')	Solid	08/27/24 12:30	08/29/24 15:10	0-4'
880-47910-4	DS-4 (0-4')	Solid	08/27/24 12:35	08/29/24 15:10	0-4'
880-47910-5	DS-9 (0-4')	Solid	08/27/24 12:40	08/29/24 15:10	0-4'
880-47910-6	DS-10 (0-4')	Solid	08/27/24 12:45	08/29/24 15:10	0-4'
880-47910-7	DS-12 (4.5')	Solid	08/27/24 12:50	08/29/24 15:10	4.5'
880-47910-8	DS-13 (3.5')	Solid	08/27/24 12:55	08/29/24 15:10	3.5'
880-47910-9	DS-14 (3.5')	Solid	08/27/24 13:00	08/29/24 15:10	3.5'
880-47910-10	DS-15 (0-4')	Solid	08/27/24 13:05	08/29/24 15:10	0-4'
880-47910-11	DS-16 (0-3')	Solid	08/27/24 13:10	08/29/24 15:10	0-3'
880-47910-12	DS-17 (5.5')	Solid	08/27/24 13:15	08/29/24 15:10	5.5'
880-47910-13	DS-18 (5')	Solid	08/27/24 13:20	08/29/24 15:10	5'

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Wor

880-47910 Chain of Custody

www.xenco.com Page 1 of 2

Project Manager:	Cindy Crain	Bill to: (if different)	Ryan Swift (346)254-9544
Company Name:	Crain Environmental	Company Name:	Foxy Acres
Address:	2925 E. 17th St.	Address:	11757 Katy Frwy, Ste. 725
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Houston, TX 77079
Phone:	(575)441-7244	Email:	cindy.crain@gmail.com; ryan@foxenergyus.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project: NM
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Lea 407	Turn Around	
Project Number:	-	☒ Routine ☐ Rush	
Project Location:	Lea Co, NM	Due Date:	
Sampler's Name:	Cindy Crain	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	-		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.6
Total Containers:		Corrected Temperature:	4.5

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015M	Parameters: Chlorides	Sample Comments
DS-1 (5.5')	S	8/27/24	1220	5.5'	C	1		X	X	
DS-2 (0-4')			1225	0-4'						
DS-3 (0-4')			1230	0-4'						
DS-4 (0-4')			1235	0-4'						
DS-9 (0-4')			1240	0-4'						
DS-10 (0-4')			1245	0-4'						
DS-12 (4.5')			1250	4.5'						
DS-13 (3.5')			1255	3.5'						
DS-14 (3.5')			1300	3.5'						
DS-15 (0-4')			1305	0-4'						

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Cindy Crain		8/28/24 1510	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: U7910

www.xenco.com Page 2 of 2

Project Manager:	Cindy Crain	Bill to: (if different)	Ryan Swift
Company Name:	Crain Environmental	Company Name:	Forty Acres
Address:	2925 E. 17th St.	Address:	11757 Katy Frwy, Ste. 725
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Houston, TX 77079
Phone:	(575) 441-7244	Email:	cindy.crain@gmail.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project: NM
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Lea 407	Turn Around	☒ Routine ☐ Rush
Project Number:	—	Due Date:	
Project Location:	Lea Co. NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Cindy Crain		
PO #:	—		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR4
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	4.5
Total Containers:		Corrected Temperature:	4.3

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2SO_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015M	Parameters: Chlorides	Sample Comments
DS-16 (0-3')	S	8/27/24	1310	0-3'	C	1		X	X	
DS-17 (5.5')			1315	5.5'						
DS-18 (5')			1320	5'						

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Cindy Crain		8/29/24 1510	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-47910-1
SDG Number: Lea Co., NM

Login Number: 47910
List Number: 1
Creator: Vasquez, Julisa

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Cindy Crain
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761

Generated 10/18/2024 7:18:47 PM

JOB DESCRIPTION

Lea 407
Lea Co., NM

JOB NUMBER

880-49899-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

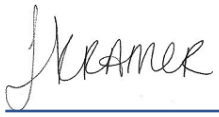
Eurofins Midland

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
10/18/2024 7:18:47 PM

Authorized for release by
Jessica Kramer, Project Manager
Jessica.Kramer@et.eurofinsus.com
(432)704-5440

Client: Crain Environmental
Project/Site: Lea 407

Laboratory Job ID: 880-49899-1
SDG: Lea Co., NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Qualifiers

GC Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
☼	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Crain Environmental
Project: Lea 407

Job ID: 880-49899-1

Job ID: 880-49899-1 Eurofins Midland

Job Narrative
880-49899-1

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable.

- Matrix QC may not be reported if insufficient sample is provided or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method.
- Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt
The samples were received on 10/16/2024 4:36 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.2°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: DS-13 (4.3') (880-49899-1) and DS-14 (4.3') (880-49899-2).

Diesel Range Organics
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

HPLC/IC
Method 300_ORGFM_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-93553 and analytical batch 880-93566 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Client Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Client Sample ID: DS-13 (4.3')

Lab Sample ID: 880-49899-1
Matrix: Solid
Date Collected: 10/15/24 13:20
Date Received: 10/16/24 16:36
Sample Depth: 4.3'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**59.5**		49.7		mg/Kg			10/17/24 14:45	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		10/17/24 09:02	10/17/24 14:45	1
Diesel Range Organics (Over C10-C28)	**59.5**		49.7		mg/Kg		10/17/24 09:02	10/17/24 14:45	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		10/17/24 09:02	10/17/24 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*10/17/24 09:02*	*10/17/24 14:45*	*1*
o-Terphenyl	*78*		*70 - 130*	*10/17/24 09:02*	*10/17/24 14:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**874**		10.1		mg/Kg			10/17/24 14:16	1

Client Sample ID: DS-14 (4.3')

Lab Sample ID: 880-49899-2
Matrix: Solid
Date Collected: 10/15/24 13:30
Date Received: 10/16/24 16:36
Sample Depth: 4.3'

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**110**		49.8		mg/Kg			10/17/24 15:00	1

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		10/17/24 09:02	10/17/24 15:00	1
Diesel Range Organics (Over C10-C28)	**110**		49.8		mg/Kg		10/17/24 09:02	10/17/24 15:00	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		10/17/24 09:02	10/17/24 15:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*10/17/24 09:02*	*10/17/24 15:00*	*1*
o-Terphenyl	*79*		*70 - 130*	*10/17/24 09:02*	*10/17/24 15:00*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**473**	**F1**	10.0		mg/Kg			10/17/24 19:46	1

Surrogate Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-49899-1	DS-13 (4.3')	73	78										
880-49899-2	DS-14 (4.3')	73	79										
LCS 880-93520/2-A	Lab Control Sample	123	118										
LCSD 880-93520/3-A	Lab Control Sample Dup	122	117										
MB 880-93520/1-A	Method Blank	92	101										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-93520/1-A
Matrix: Solid
Analysis Batch: 93537

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 93520

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		10/17/24 09:02	10/17/24 09:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		10/17/24 09:02	10/17/24 09:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		10/17/24 09:02	10/17/24 09:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*92*		*70 - 130*	*10/17/24 09:02*	*10/17/24 09:14*	*1*
o-Terphenyl	*101*		*70 - 130*	*10/17/24 09:02*	*10/17/24 09:14*	*1*

Lab Sample ID: LCS 880-93520/2-A
Matrix: Solid
Analysis Batch: 93537

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 93520

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	989.5		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1014		mg/Kg		101	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*123*		*70 - 130*
o-Terphenyl	*118*		*70 - 130*

Lab Sample ID: LCSD 880-93520/3-A
Matrix: Solid
Analysis Batch: 93537

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 93520

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	994.5		mg/Kg		99	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	1037		mg/Kg		104	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*122*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-93508/1-A
Matrix: Solid
Analysis Batch: 93519

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/17/24 11:24	1

QC Sample Results

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-93508/2-A
Matrix: Solid
Analysis Batch: 93519

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	227.5		mg/Kg		91	90 - 110		

Lab Sample ID: LCSD 880-93508/3-A
Matrix: Solid
Analysis Batch: 93519

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	223.8		mg/Kg		90	90 - 110	2	20

Lab Sample ID: MB 880-93553/1-A
Matrix: Solid
Analysis Batch: 93566

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/17/24 19:25	1

Lab Sample ID: LCS 880-93553/2-A
Matrix: Solid
Analysis Batch: 93566

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	225.1		mg/Kg		90	90 - 110		

Lab Sample ID: LCSD 880-93553/3-A
Matrix: Solid
Analysis Batch: 93566

Client Sample ID: Lab Control Sample Dup
Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	226.1		mg/Kg		90	90 - 110	0	20

Lab Sample ID: 880-49899-2 MS
Matrix: Solid
Analysis Batch: 93566

Client Sample ID: DS-14 (4.3')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	473	F1	251	679.4	F1	mg/Kg		82	90 - 110		

Lab Sample ID: 880-49899-2 MSD
Matrix: Solid
Analysis Batch: 93566

Client Sample ID: DS-14 (4.3')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	473	F1	251	677.2	F1	mg/Kg		81	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

GC Semi VOA

Prep Batch: 93520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-1	DS-13 (4.3')	Total/NA	Solid	8015NM Prep	
880-49899-2	DS-14 (4.3')	Total/NA	Solid	8015NM Prep	
MB 880-93520/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-93520/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-93520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 93537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-1	DS-13 (4.3')	Total/NA	Solid	8015B NM	93520
880-49899-2	DS-14 (4.3')	Total/NA	Solid	8015B NM	93520
MB 880-93520/1-A	Method Blank	Total/NA	Solid	8015B NM	93520
LCS 880-93520/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	93520
LCSD 880-93520/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	93520

Analysis Batch: 93659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-1	DS-13 (4.3')	Total/NA	Solid	8015 NM	
880-49899-2	DS-14 (4.3')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 93508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-1	DS-13 (4.3')	Soluble	Solid	DI Leach	
MB 880-93508/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-93508/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-93508/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 93519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-1	DS-13 (4.3')	Soluble	Solid	300.0	93508
MB 880-93508/1-A	Method Blank	Soluble	Solid	300.0	93508
LCS 880-93508/2-A	Lab Control Sample	Soluble	Solid	300.0	93508
LCSD 880-93508/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	93508

Leach Batch: 93553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-2	DS-14 (4.3')	Soluble	Solid	DI Leach	
MB 880-93553/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-93553/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-93553/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-49899-2 MS	DS-14 (4.3')	Soluble	Solid	DI Leach	
880-49899-2 MSD	DS-14 (4.3')	Soluble	Solid	DI Leach	

Analysis Batch: 93566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-2	DS-14 (4.3')	Soluble	Solid	300.0	93553
MB 880-93553/1-A	Method Blank	Soluble	Solid	300.0	93553
LCS 880-93553/2-A	Lab Control Sample	Soluble	Solid	300.0	93553
LCSD 880-93553/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	93553
880-49899-2 MS	DS-14 (4.3')	Soluble	Solid	300.0	93553

QC Association Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Analysis Batch: 93566 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49899-2 MSD	DS-14 (4.3')	Soluble	Solid	300.0	93553

Lab Chronicle

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Client Sample ID: DS-13 (4.3')

Lab Sample ID: 880-49899-1

Date Collected: 10/15/24 13:20
Matrix: Solid
Date Received: 10/16/24 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			93659	10/17/24 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	93520	10/17/24 09:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93537	10/17/24 14:45	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	93508	10/17/24 07:50	SA	EET MID
Soluble	Analysis	300.0		1			93519	10/17/24 14:16	CH	EET MID

Client Sample ID: DS-14 (4.3')

Lab Sample ID: 880-49899-2

Date Collected: 10/15/24 13:30
Matrix: Solid
Date Received: 10/16/24 16:36

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			93659	10/17/24 15:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	93520	10/17/24 09:02	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	93537	10/17/24 15:00	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	93553	10/17/24 13:06	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	93566	10/17/24 19:46	CH	EET MID

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Laboratory: Eurofins Midland

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Method	Method Description	Protocol	Laboratory
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Crain Environmental
Project/Site: Lea 407

Job ID: 880-49899-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-49899-1	DS-13 (4.3')	Solid	10/15/24 13:20	10/16/24 16:36	4.3'
880-49899-2	DS-14 (4.3')	Solid	10/15/24 13:30	10/16/24 16:36	4.3'

eurofins | Environment Testing Xenco

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300
Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work O

880-49899 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Cindy Crain	Bill to: (if different)	Ryan Swift
Company Name:	Crain Environmental	Company Name:	Forty Acres
Address:	2925 E. 17th St.	Address:	11757 Katy Frwy, Ste. 725
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Houston, TX 77079
Phone:	(575) 441-7244	Email:	Cindy.crain@gmail.com; ryan@fortyacres.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project: NM
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	Lea 407	Turn Around	
Project Number:	–	☒ Routine ☐ Rush	
Project Location:	Lea Co., NM	Due Date:	
Sampler's Name:	Cindy Crain	TAT starts the day received by the lab, if received by 4:30pm	
PO #:	–		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR4
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.3
Total Containers:		Corrected Temperature:	1.2

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Parameters: TPH 8015M	Parameters: Chlorides	Sample Comments
DS-13 (4.3')	S	10/15/24	13:20	4.3'	C	1	X	X	
DS-14 (4.3')	S	10/15/24	13:30	4.3'	C	1	X	X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of $85.00 will be applied to each project and a charge of $5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Cindy Crain		10/16/24 1530	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-49899-1
SDG Number: Lea Co., NM

Login Number: 49899
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Appendix E: Photographic Documentation

APPENDIX E
PHOTOGRAPHIC DOCUMENTATION
WEST EUMONT UNIT 407 BATTERY

View of release area (6/14/23).

View of release area (6/14/23).

View of release area (6/14/23).

View of release area (6/14/23).

View of release area (6/14/23).

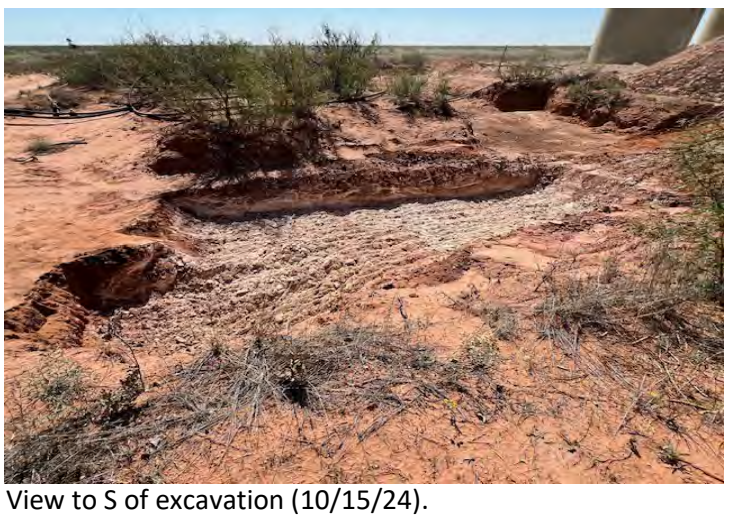
View of release point (6/14/23).

APPENDIX E
PHOTOGRAPHIC DOCUMENTATION
WEST EUMONT UNIT 407 BATTERY

View to W of excavation (10/15/24).

View to N of excavation (10/15/24).

View to W of excavation (10/15/24).



View to S of excavation (10/15/24).

View to E of excavation (10/15/24).

View of excavation at NE corner (10/15/24).

Grain Environmental

Appendix F: Waste Manifests

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 7-24-24

Generator: Forty Acres

Job #: J&L # 3429

Trucking Co: M. Mata # 46

Site Location: West Eumont Unit 412

Total Yards/Day: (2 ea.) 11 40 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 7-24-24

Generator: Forty Acres

Job #: J&L # 3479

Trucking Co: M. Mata # 51

Site Location: West Eumont Unit 412

Total Yards/Day: 20 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 7-25-24

Generator: Forty Acres

Job #: J+C # 3429

Trucking Co: M. Mata # 151

Site Location: West Eumont Unit 410

Total Yards/Day: (2 Days) 40 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 7-30-24

Generator: Forty Acres

Job #: J&L # 3441

Trucking Co: M Mata # 1

Site Location: WEU Lea 407 Batt

Total Yards/Day: (Nea) III 36yds

Landfarm Representative: David Jett

One of these 7/30/24 loads was taken to J&L on 7/29/24, but David wasn't there when the load was taken and the 7/29/24 load was added to this 7/30/24 ticket.

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 7-30-24

Generator: Forty Acres

Job #: J&L # 3441

Trucking Co: M. Mata # 151

Site Location: WEU 407 Batt

Total Yards/Day: 20 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 8-2-24

Generator: Forty Acres

Job #: Job # 3446

Trucking Co: M. Mata #01 (12 yds)

Site Location: WEH (Loc 407) Batt

Total Yards/Day: (12 yds) 111 48 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 8-5-24

Generator: Forty Acres

Job #: J&L # 3446

Trucking Co: M. Mata # 44

Site Location: WEU Lea 407 Batt

Total Yards/Day: (12 cu.) TH (5) 60yds

Landfarm Representative: David Jett

236 YARDS

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 8-6-24

Generator: Forty Acres

Job #: J+L # 3446

Trucking Co: M. MATA # 44

Site Location: WEU Lea 407 Batt.

Total Yards/Day: 12 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 10-21-24

Generator: Footy Acres

Job #: J+L# 3513

Trucking Co: Mata # 49

Site Location: West Monument #407

Total Yards/Day: (20ca) 40 yds 40 yds

Landfarm Representative: David Jett

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 10-21-24

Generator: Forty Acres

Job #: 1 & 2 # 3513

Trucking Co: Mata #46

Site Location: West Fumont #407

Total Yards/Day: 20 yds

Landfarm Representative: David Jett

120 YARDS

J&L Landfarm Inc

PO Box 356

Hobbs, NM 88241

575-369-9730 – David Jett

575-390-7446 – Michelle Kuhn

Permit# NM-01-0023

Date: 10-21-24

Generator: Forty Acres

Job #: J & L # 3511

Trucking Co: MATA # 49

Site Location: West Eumont # 410

Total Yards/Day: (20yd ea) (6) 20yds

Landfarm Representative: David Jett

The Oil Conservation Division (OCD) has accepted the application, Application ID: 391990

Inbox

OCDOnline@state.nm.us
to me

Fri, Oct 11, 12:22 PM (4 days ago)

To whom it may concern (c/o Cindy Crain for FORTY ACRES ENERGY, LLC),

The OCD has received the submitted *Notification for (Final) Sampling of a Release* (C-141N), for incident ID (n#) nAPP2230057252.

The sampling event is expected to take place:

When: 10/15/2024 @ 15:50
Where: C-02-21S-35E Lot: 6 0 FNL 0 FEL (32.516528,-103.340494)

Additional Information: Samples will be collected by Cindy Crain (Crain Environmental)
(575) 441-7244

Additional Instructions: GPS Coordinates to the site are: 32.516528, -103.340494

An OCD representative may be available onsite at the date and time reported. In the absence or presence of an OCD representative, sampling pursuant to 19.15.29.12.D NMAC is Sampling must be performed following an approved sampling plan or pursuant to 19.15.29.12.D.(1).(c) NMAC. Should there be a change in the scheduled date and time of the sam another notification should be resubmitted through OCD permitting as soon as possible.

- **Failure to notify the OCD of sampling events including any changes in date/time per the requirements of 19.15.29.12.D.(1).(a) NMAC, may result in the remedial samples not being accepted.**

If you have any questions regarding this application, or don't know why you have received this email, please contact us.

New Mexico Energy, Minerals and Natural Resources Department
1220 South St. Francis Drive
Santa Fe, NM 87505

Reply Forward

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 404521

QUESTIONS

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2316652967**
Incident Name	**NAPP2316652967 WEST EUMONT UNIT 407 BATTERY @ 30-025-03376**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-03376] WEST EUMONT UNIT #204**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	WEST EUMONT UNIT 407 BATTERY
Date Release Discovered	06/14/2023
Surface Owner	Private

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: Corrosion | Other (Specify) | Produced Water | Released: 25 BBL | Recovered: 25 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.*

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QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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	**Yes**
Reasons why this would be considered a submission for a notification of a major release	**From paragraph A. "Major release" determine using:** **(1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.**
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: 07/16/2024

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QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

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 100 and 500 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
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	Yes

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)	2720
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	4030
GRO+DRO (EPA SW-846 Method 8015M)	2930
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	2100
What is the estimated volume (in cubic yards) that will be reclaimed	160
What is the estimated surface area (in square feet) that will be remediated	2100
What is the estimated volume (in cubic yards) that will be remediated	160
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.	

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QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
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.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for **off-site** disposal	MONUMENT SITE #15 (TNM-94-58) [fAB0000000056]
OR which OCD approved well (API) will be used for **off-site** disposal	*Not answered.*
OR is the **off-site** disposal site, to be used, out-of-state	No
OR is the **off-site** disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No
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 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: 07/16/2024
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.	

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Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Deferral Requests Only	
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.	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS (continued)

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**376977**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**08/27/2024**
What was the (estimated) number of samples that were to be gathered	**12**
What was the sampling surface area in square feet	**5600**

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	Yes
Have the lateral and vertical extents of contamination been fully delineated	**Yes**
Was this release entirely contained within a lined containment area	**No**
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	2100
What was the total volume (cubic yards) remediated	356
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	2100
What was the total volume (in cubic yards) reclaimed	356
Summarize any additional remediation activities not included by answers (above)	Sample notification was provided on 10/11/24 for samples collected on 10/15/24. A copy of the notification is provided in the attachments. The excavation will be backfilled upon approval of this Closure Report.

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

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

I hereby agree and sign off to the above statement	Name: Cindy Crain Email: cindy.crain@gmail.com Date: 11/18/2024

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QUESTIONS (continued)

Operator:	OGRID:
FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Operator: FORTY ACRES ENERGY, LLC 11757 KATY FWY HOUSTON, TX 77079173	OGRID: 371416
	Action Number: 404521
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	3/4/2025