Remediation Summary and Closure Report

March 24, 2025

Anderson Ranch Unit #013
Crude Oil Release
Incident #nAPP2426256273
API #30-025-00391
Lea County, New Mexico

Prepared For:

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Table of Contents

TABLES

FIGURES

APPENDICES

1.0 Introduction

Crain Environmental (CE), on behalf of Grand Banks Energy Company (Grand Banks), has prepared this Remediation Summary and Closure Report for the crude oil release at the Anderson Ranch Unit #013 (ARU #13). The Site is located in Unit Letter K (NE/SW), Section 11, Township 16 South, Range 32 East, Lea County, New Mexico at global positioning system (GPS) coordinates of 32.934319°, -103.739263°. The property surface rights are owned by the State of New Mexico, and land use in the Site vicinity is primarily oil and gas production and cattle grazing. The location of the release is depicted on Figure 1.

2.0 Background

On November 8, 2023, Grand Banks received a letter from the New Mexico State Land Office (SLO) that requested plugging of several Anderson Ranch Unit (ARU) wells, and remediation of several other ARU wells, including the ARU #13.

In a review of the ARU leases, the Environmental Compliance Office (ECO) of SLO made the following comments regarding the ARU #13:

- The site was located immediately adjacent to a playa.
- Soil staining around well head must be investigated and remediated.
- Pit scar stays visible in all aerials north of well pad.
- The 2017, 2020, and 2023 aerials illustrate potential releases on southern boundary, source may be line to flare.

On November 27, 2023, CE conducted a site inspection at ARU 13, and oil staining was observed around the wellhead. On March 5, 2024, CE conducted initial soil investigations at the area around the wellhead, at the southwestern boundary of the well pad, and in the former pit area.

On May 1, 2024, a Remediation/Reclamation Workplan was submitted to ECO that proposed remediation of TPH impacted soil around the wellhead with MicroBlaze Emergency Liquid Spill Control (MicroBlaze) per manufacturer's specifications. The ECO requested that a revised workplan be submitted that included additional information regarding the MicroBlaze treatment and addressing proper seed bed preparation of the former drilling pit area. A Revised Remediation/Reclamation Workplan was submitted to the ECO on June 9, 2024, and MicroBlaze treatment began on August 20, 2024.

On September 18, 2024, a Notice of Release (NOR) was provided to the New Mexico Oil Conservation Division (NMOCD) for the area around the wellhead, and an Initial C-141 was provided to the NMOCD for Incident #nAPP2426256273 on that same date. The date of discovery of the release was listed on the NOR and C-141 as March 29, 2024. The extent of the release is depicted on Figure 2.

On September 25, 2024, confirmation soil samples were collected from the area of MicroBlaze treatment. Upon receipt of the laboratory results, Grand Banks elected to conduct soil remediation by dig and haul methods in lieu of continuation of MicroBlaze treatment.

On December 23, 2024, the NMOCD approved a 90-day extension for submitting a Closure Report to the NMOCD, with a due date of March 24, 2025. A copy of the NMOCD correspondence is included in Appendix A.

Soil remediation activities have been completed, and this Remediation Summary and Closure Report for Incident Number nAPP2426254839 is being submitted by the due date of March 24, 2025 in accordance with 19.15.29.11 New Mexico Administrative Code (NMAC).

3.0 NMOCD Closure Criteria

Cleanup standards for oil 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.

3.1 Groundwater Evaluation

A review of the New Mexico Office of the State Engineer (NMOSE) records indicated one well (L 02846) within a 0.5-mile radius of the Site. Well L 02846 was installed on April 11, 1955, to a depth of 328 feet, and records a depth to water at 275 feet.

A review of United States Geological Survey (USGS) records indicated one well (USGS 325614103434001) with recorded depth to groundwater information within a 0.5-mile radius of the Site. Well USGS 325614103434001 provides depth to water records up to March 27, 1981 (216.74' bgs).

Each well within a 0.5-mile radius is listed in the table below. Figure 3 provides a 0.5-mile radius circle around the Site and shows the location of each well. Well records for each well are provided in Appendix

B. Based on the available water well data, it is estimated that the 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)
L 02846	Approx. 820 feet to NW	1955	N/A	328 / 275
USGS 325614103434001	Approx. 1,419 feet to SE	1961	N/A	317 / 216.74 (3/27/81)

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) and National Wetlands Inventory Map (Figure 4) indicates there is a playa lake located 128 feet west of the site. No sinkhole is 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 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 reviewed 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 nearest freshwater pond, and emergent wetland is located 128 feet west of the site. A review of the Federal Emergency Management Act (FEMA) floodplain map shows the wetland located 128 feet west of the site. Finally, the New Mexico Bureau of Land Management (BLM) karst potential map indicates the Site is located within a “low karst potential” area. Figures 4, 5, and 6 depict USFWS wetlands information, FEMA floodplain information, and the karst potential data, respectively.

3.4 Closure Criteria Applicable to the Site

Even though the depth to groundwater at the site is estimated to be greater than 100’ below ground surface (bgs), a playa lake/wetland is located 128 feet west of the site, and the most stringent NMOCD 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 depth to groundwater is estimated to be greater than 100' bgs.

4.3 Wellhead Protection Area

The 0.5-mile wellhead protection area is shown on Figure 3. Referring to well NMOSE and USGS well records, the depth to groundwater at the Site is greater than 100' bgs. A review of the USFWS wetlands map indicated a freshwater emergent wetland is located 128 feet west of the Site. There were no other water sources, springs, or other sources of freshwater extraction identified within 0.5-mile of the Site.

4.4 Distance to Nearest Significant Watercourse

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

5.0 Summary of Remediation Activities

On March 5, 2024, two soil samples were collected from the wellhead area (S-1 and S-6), and two samples (S-4 and S-5) were collected from the suspect areas on the south end of the well pad. Samples were collected from depths of 1' and 2' bgs at each location using a backhoe. The samples were placed in clean glass sample jars, properly labeled, immediately placed on ice, and hand delivered to Eurofins Environment Testing (Eurofins) in Midland, Texas under proper chain-of-custody control for analysis of total petroleum hydrocarbons (TPH) by Environmental Protection Agency (EPA) SW-846 Method 8015 Modified, for benzene, toluene, ethylbenzene and xylenes (collectively referred to as BTEX) by EPA SW-846 Method 8021B, and for chlorides by EPA Method 300. Additionally, two composite samples (S-2 and S-3) were collected at a depth of 1' bgs from the former pit area located north of the well to determine if the soil is suitable for vegetation re-establishment. Samples S-2 and S-3 were analyzed for pH, electrical conductivity (EC), sodium adsorption ratio (SAR), and exchangeable sodium percentage (ESP).

Table 1 provides a summary of the laboratory results of samples S-1 and S-4 through S-6. Figure 2 shows the sample locations. The laboratory report and chain of custody documentation is provided in Appendix C. Photographic documentation is provided in Appendix D.

Referring to Table 1, samples collected at S-1 reported a chloride concentration above the Closure Criteria at a depth of 1' bgs (741 mg/kg), and a TPH concentration above the Closure Criteria at a depth of 2' bgs (114 mg/kg). Samples collected at S-6 reported TPH concentrations above the Closure Criteria at depths of 1' bgs (339 mg/kg) and 2' bgs (356 mg/kg). Concentrations of TPH, BTEX, and chlorides were reported below the Closure Criteria in each sample from S-4 and S-5.

Upon ECO approval of the revised Remediation Workplan, the soil around the wellhead was tilled, and MicroBlaze (mixed with fresh water) was applied to the surface area (measuring approximately 30' x 30') on August 20, 2024. Fresh water was applied to the area of MicroBlaze application every 3 to 4 days, and the area was re-tilled on September 12, 2024, prior to water application.

The former pit area at the ARU #13 was seeded on September 4, 2024, following a heavy rainfall event on September 2, 2024. Approximately 60 pounds of NMSLO coarse seed was applied by interseeding methods (as approved by ECO), and fresh water was applied to the area on 3 separate dates (September 6, September 10, and September 13, 2024).

On September 25, 2024, confirmation samples were collected from five locations (S-1, and S-6 through S-9) within the MicroBlaze treatment area to determine the effectiveness of remediation. Samples were collected from the surface (0-6" bgs) and at depths of 1' bgs and either 2.5' or 3' bgs at each sample location. All samples were placed in laboratory prepared containers, properly labeled, immediately placed on ice, and hand delivered to Eurofins for analysis of TPH, BTEX, and chlorides.

Table 1 provides a summary of the laboratory results. Figure 2 shows the sample locations. The laboratory report and chain of custody documentation is provided in Appendix C. Photographic documentation is provided in Appendix D.

Referring to Table 1, chloride concentrations were reported above the Closure Criteria in samples collected from S-1 (at depths of 0-6", 1', and 3'), S-7 (at depths of 1' and 2.5'), and S-8 (at depths of 0-6", 1', and 2.5'). Concentrations of TPH were reported above the Closure Criteria in samples collected from S-8 (at depths of 0-6" and 2.5') and S-9 (at a depth of 0-6").

On September 28, 2024, a Notice of Release (NOR) and Initial C-141 were submitted to the NMOCD for Incident #nAPP2426256273. On October 26, 2024, Grand Banks notified ECO that MicroBlaze treatment would be discontinued, and affected soil would be excavated and hauled to a NMOCD approved disposal facility.

A 28' x 28' surface area to the north and east of the wellhead was excavated to a depth of 4.1' bgs, and a 10' x 10' area was excavated tp a depth of 1' bgs in the area of sample S-9 (located west of the wellhead) until five-point composite confirmation soil samples were collected from the bottom and sidewalls of each excavation on January 15, 2025. All confirmation samples were collected pursuant to 19.15.29.12(D) NMAC, and were placed in clean glass sample jars, properly labeled, immediately placed on ice and hand delivered to Eurofins under proper chain-of-custody control for analysis of TPH, BTEX, and chlorides.

Table 2 provides a summary of the laboratory results. Figure 2 shows the sample locations. The laboratory report and chain of custody documentation is provided in Appendix C. Photographic documentation is provided in Appendix D.

Referring to Table 2, all TPH, BTEX, and chloride concentrations were reported below the test method detection limits or Closure Criteria.

From January 22, 2025, to January 29, 2025, a total of 240 cubic yards (cy) of excavated soil were hauled to disposal at GM Inc. Waste Manifests are provided in Appendix E. The final excavation north and east of the wellhead measured 28' x 28', and the final excavation west of the wellhead measured 10' x 10'.

Upon NMOCD approval of this Closure Report, the excavation will be backfilled to grade with non-impacted similar material obtained from a nearby 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.

6.0 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reported in Job Numbers 880-40528-1, 880-49110-1, and 880-53354-1 generated by Eurofins in Midland, Texas, 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 in Appendix C.

7.0 Closure Request

A total of 240 cubic yards of soil was excavated and hauled to disposal at GM Inc. All five-point 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 on the well pad of an active well will be backfilled to grade with non-impacted similar material obtained from a nearby 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.

Grand Banks Energy respectfully requests Closure of Incident # nAPP2426256273.

8.0 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: Chris Gaddy
Octane Energy
310 West Wall, Suite 300
Midland, Texas 79701

Copy 3: New Mexico State Land Office
Environmental Compliance Office
eco@slo.state.nm

TABLES

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FOLLOWING MICROBLAZE TREATMENT
GRAND BANKS ENERGY, CO.
ANDERSON RANCH UNIT #013
INCIDENT # nAPP2426256273

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 (Surface to 4' bgs)							**100**	**10**	**-**	**-**	**-**	**50**	**600**
S-1 (1')	03/05/24	1'	Treated	<49.6	**61.4**	<49.6	**61.4**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**741**
S-1 (2')	03/05/24	2'	Treated	<50.5	**114**	<50.5	**114**	<0.00198	**0.00206**	**0.00233**	**0.0132**	**0.0175**	**515**
S-1 (1')	09/25/24	1'	Treated	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**1,130**
S-1 (0-6")	09/25/24	0-6"	Treated	<49.9	<49.9	<49.9	<49.9	<0.00201	0.00201	<0.00201	<0.00402	<0.00402	**1,280**
S-1 (3')	09/25/24	3'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**796**
S-4 (1')	03/05/24	1'	In Situ	<49.7	**50.3**	<49.7	**50.3**	<0.00201	**0.00301**	<0.00201	<0.00402	<0.00402	**41.0**
S-4 (2')	03/05/24	2'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	**94.3**
S-5 (1')	03/05/24	1'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**87.3**
S-5 (2')	03/05/24	2'	In Situ	<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	**49.9**
S-6 (1')	03/05/24	1'	Treated	<50.4	**339**	<50.4	**339**	<0.00200	**0.00238**	<0.00200	<0.00401	<0.00401	**178**
S-6 (2')	03/05/24	2'	Treated	<50.5	**356**	<50.5	**356**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**270**
S-6 (0-6")	09/25/24	0-6"	Treated	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**65.5**
S-6 (1')	09/25/24	1'	Treated	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**63.2**
S-6 (3')	09/25/24	3'	Treated	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**138**
S-7 (0-6")	09/25/24	0-6"	Treated	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**422**
S-7 (1')	09/25/24	1'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**648**
S-7 (2.5')	09/25/24	2.5'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**1,010**
S-8 (0-6")	09/25/24	0-6"	Treated	<50.0	**420 F1**	<50.0	**420**	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**1,250**
S-8 (1')	09/25/24	1'	Treated	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**906**
S-8 (2.5')	09/25/24	2.5'	Treated	<49.9	**155**	<49.9	**155**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**877**
S-9 (0-6")	09/25/24	0-6"	Treated	<49.8	**393**	<49.8	**393**	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**181**
S-9 (1')	09/25/24	1'	Treated	<50.0	**60.4**	<50.0	**60.4**	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	**303**
S-9 (3')	09/25/24	3'	Treated	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**273**

Notes:

1. GRO: Gasoline Range Organics
2. DRO: Diesel Range Organics
3. MRO: Motor Oil Range Organics
4. -: No NMOCD Closure Criteria established.
5. bgs: Below Ground Surface
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 indicates samples collected after MicroBlaze treatment.
10. F1: MS and/or MSD recovery exceeds control limits.

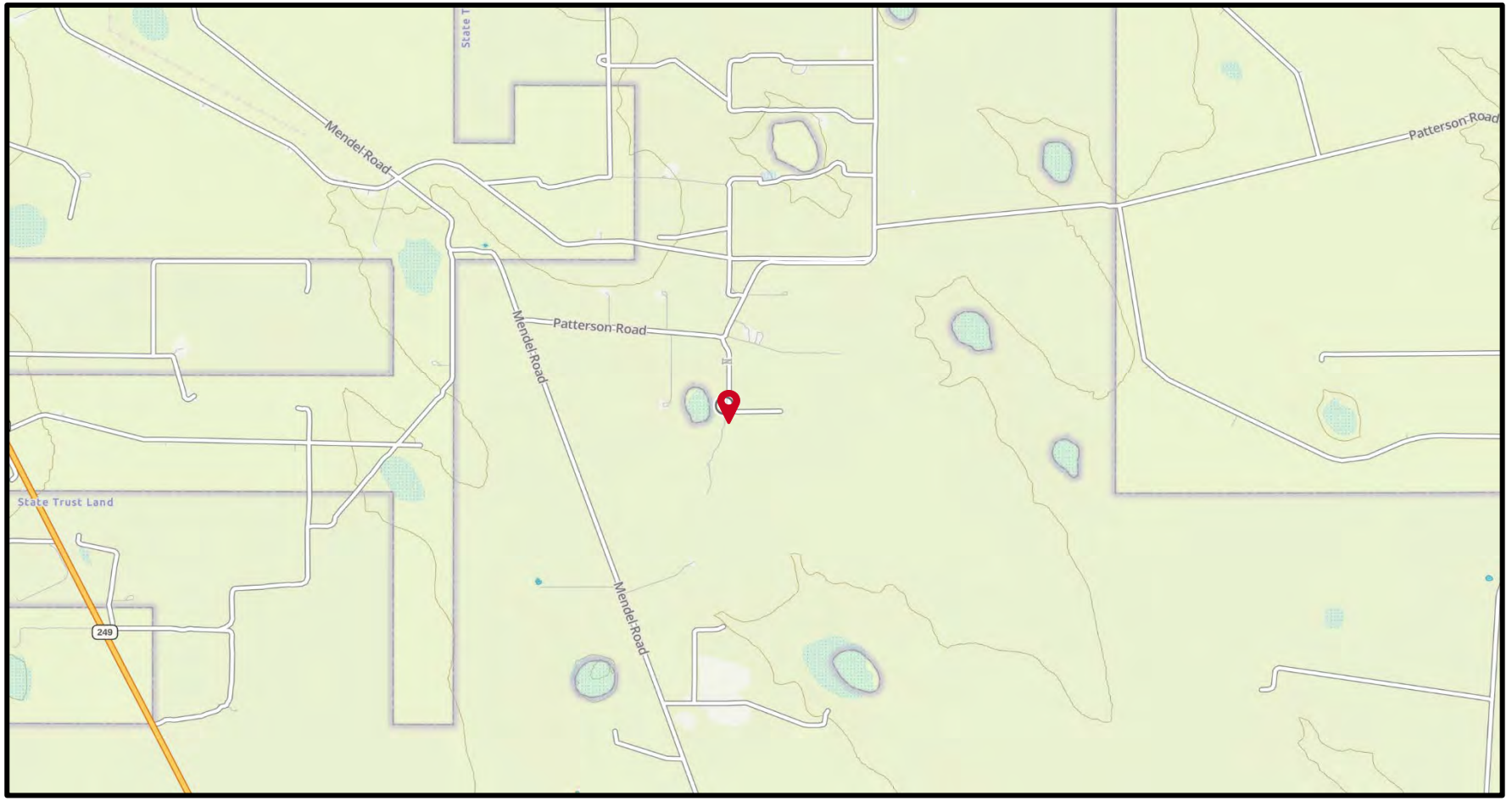
TABLE 2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS FROM EXCAVATION
GRAND BANKS ENERGY, CO.
ANDERSON RANCH UNIT #013
INCIDENT # nAPP2426256273

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**
S-1 (1')	03/05/24	1'	Treated	<49.6	**61.4**	<49.6	**61.4**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**741**
S-1 (2')	03/05/24	2'	Treated	<50.5	**114**	<50.5	**114**	<0.00198	**0.00206**	**0.00233**	**0.0132**	**0.0175**	**515**
S-1 (1')	09/25/24	1'	Treated	<49.9	<49.9	<49.9	<49.9	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**1,130**
S-1 (0-6")	09/25/24	0-6"	Treated	<49.9	<49.9	<49.9	<49.9	<0.00201	0.00201	<0.00201	<0.00402	<0.00402	**1,280**
S-1 (3')	09/25/24	3'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**796**
S-14 (0-4')	01/15/25	0-4'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<10.1
S-4 (1')	03/05/24	1'	In Situ	<49.7	**50.3**	<49.7	**50.3**	<0.00201	**0.00301**	<0.00201	<0.00402	<0.00402	**41.0**
S-4 (2')	03/05/24	2'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	**94.3**
S-5 (1')	03/05/24	1'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**87.3**
S-5 (2')	03/05/24	2'	In Situ	<50.2	<50.2	<50.2	<50.2	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	**49.9**
S-6 (1')	03/05/24	1'	Treated	<50.4	**339**	<50.4	**339**	<0.00200	**0.00238**	<0.00200	<0.00401	<0.00401	**178**
S-6 (2')	03/05/24	2'	Treated	<50.5	**356**	<50.5	**356**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**270**
S-6 (0-6")	09/25/24	0-6"	Treated	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**65.5**
S-6 (1')	09/25/24	1'	Treated	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**63.2**
S-6 (3')	09/25/24	3'	Treated	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**138**
S-7 (0-6")	09/25/24	0-6"	Treated	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**422**
S-7 (1')	09/25/24	1'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	**648**
S-7 (2.5')	09/25/24	2.5'	Treated	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**1,010**
S-16 (0-4')	01/15/25	0-4'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<9.98
S-8 (0-6")	09/25/24	0-6"	Treated	<50.0	**420 F1**	<50.0	**420**	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	**1,250**
S-8 (1')	09/25/24	1'	Treated	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	**906**
S-8 (2.5')	09/25/24	2.5'	Treated	<49.9	**155**	<49.9	**155**	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**877**
S-23 (4.1')	01/15/25	4.1'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<10.0
S-9 (0-6")	09/25/24	0-6"	Treated	<49.8	**393**	<49.8	**393**	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	**181**
S-9 (1')	09/25/24	1'	Treated	<50.0	**60.4**	<50.0	**60.4**	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	**303**
S-9 (3')	09/25/24	3'	Treated	<49.6	<49.6	<49.6	<49.6	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**273**
S-10 (0-1')	01/15/25	0-1'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	<10.0
S-11 (0-1')	01/15/25	0-1'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<9.98
S-12 (0-1')	01/15/25	0-1'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<9.94
S-13 (0-1')	01/15/25	0-1'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00201	0.00201	<0.00201	<0.00402	<0.00402	<10.0
S-15 (0-4')	01/15/25	0-4'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<9.96
S-17 (0-4')	01/15/25	0-4'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	**11.2**
S-18 (0-4')	01/15/25	0-4'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00400	<0.00400	<10.0
S-19 (0-4')	01/15/25	0-4'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00397	<0.00397	<10.1
S-20 (0-4')	01/15/25	0-4'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00404	<0.00404	<10.0
S-21 (0-4')	01/15/25	0-4'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	<9.98
S-22 (4.1')	01/15/25	4.1'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	<9.94
S-24 (4.1')	01/15/25	4.1'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00198	<0.00198	<0.00198	<0.00396	<0.00396	<10.1
S-25 (4.1')	01/15/25	4.1'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00201	0.00201	<0.00201	<0.00402	<0.00402	**10.2**

Notes:

1. GRO: Gasoline Range Organics
2. DRO: Diesel Range Organics
3. MRO: Motor Oil Range Organics
4. -: No NMOCD Closure Criteria established.
5. bgs: Below Ground Surface
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 indicates soil was excavated and disposed.

FIGURES



LEGEND:

Site Location

Base Map from GAIA Topo

N
W
E
S

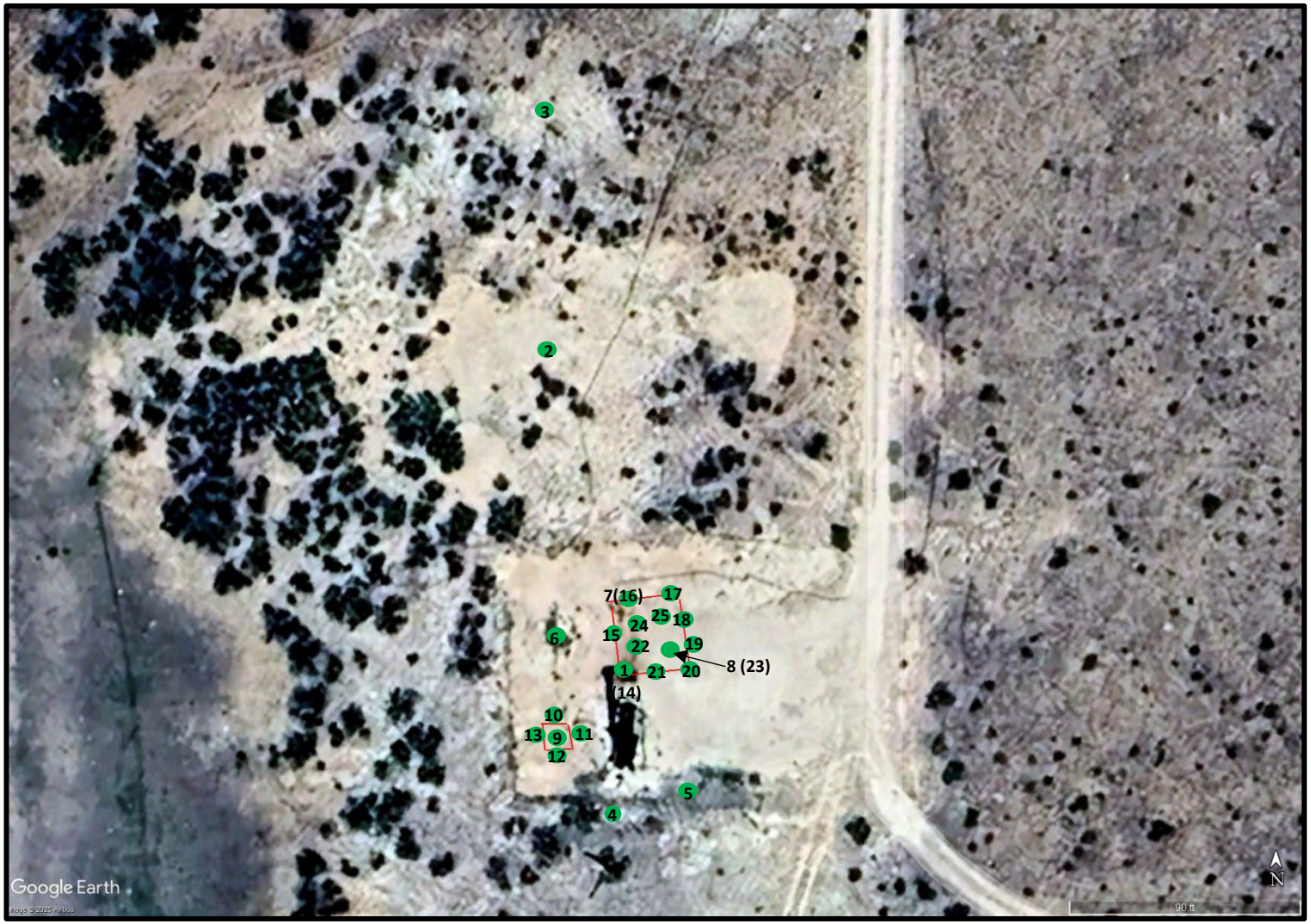
Figure 1
Site Location Map
Grand Banks Energy Co.
Anderson Ranch Unit #013
Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: March 22, 2025

GPS: 32.934319° -103.739263°

Grain Environmental



LEGEND:

Excavation Boundary

4 Sample Location with Sample Number (S-#)

Base Map from Google Earth Pro

Figure 2

Site Map with Sample Locations

Grand Banks Energy, Co.

Anderson Ranch Unit #013

Lea County, New Mexico

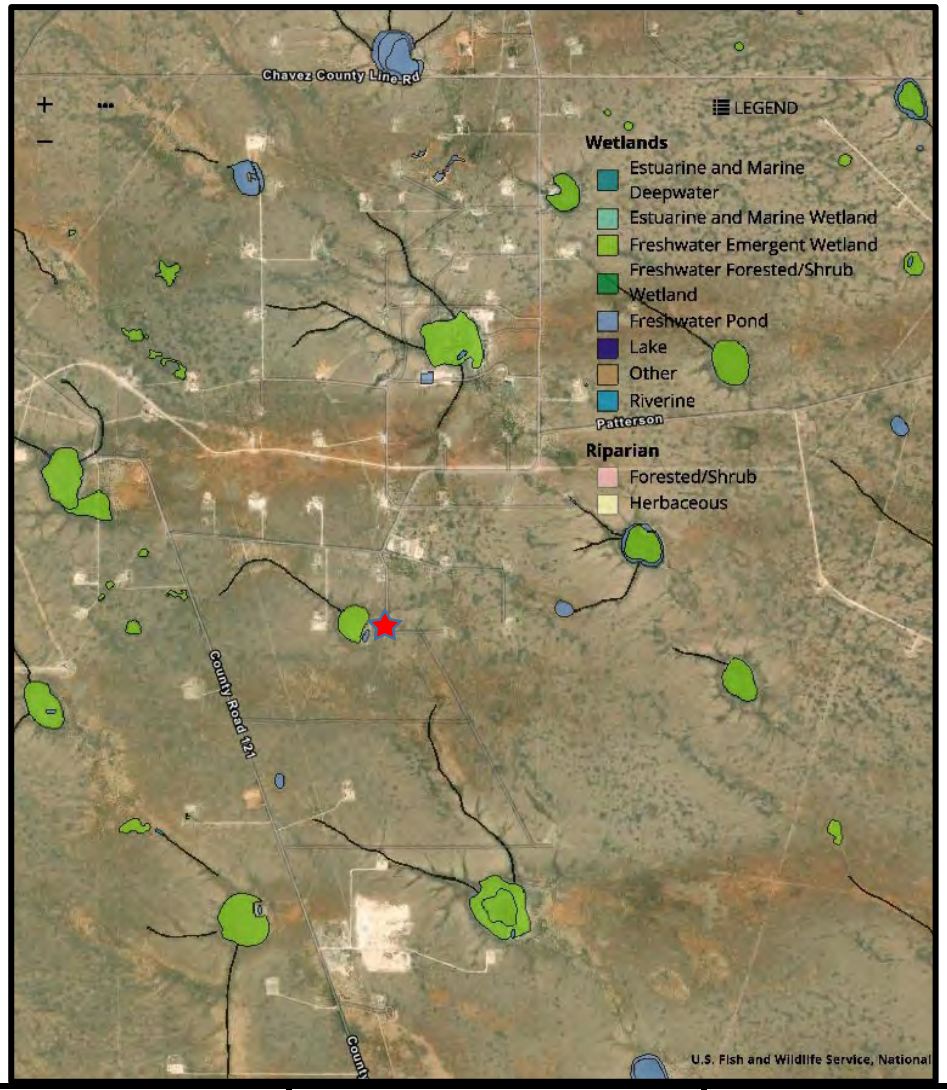
Drafted by: CC | Checked by: CC

Draft: March 24, 2025

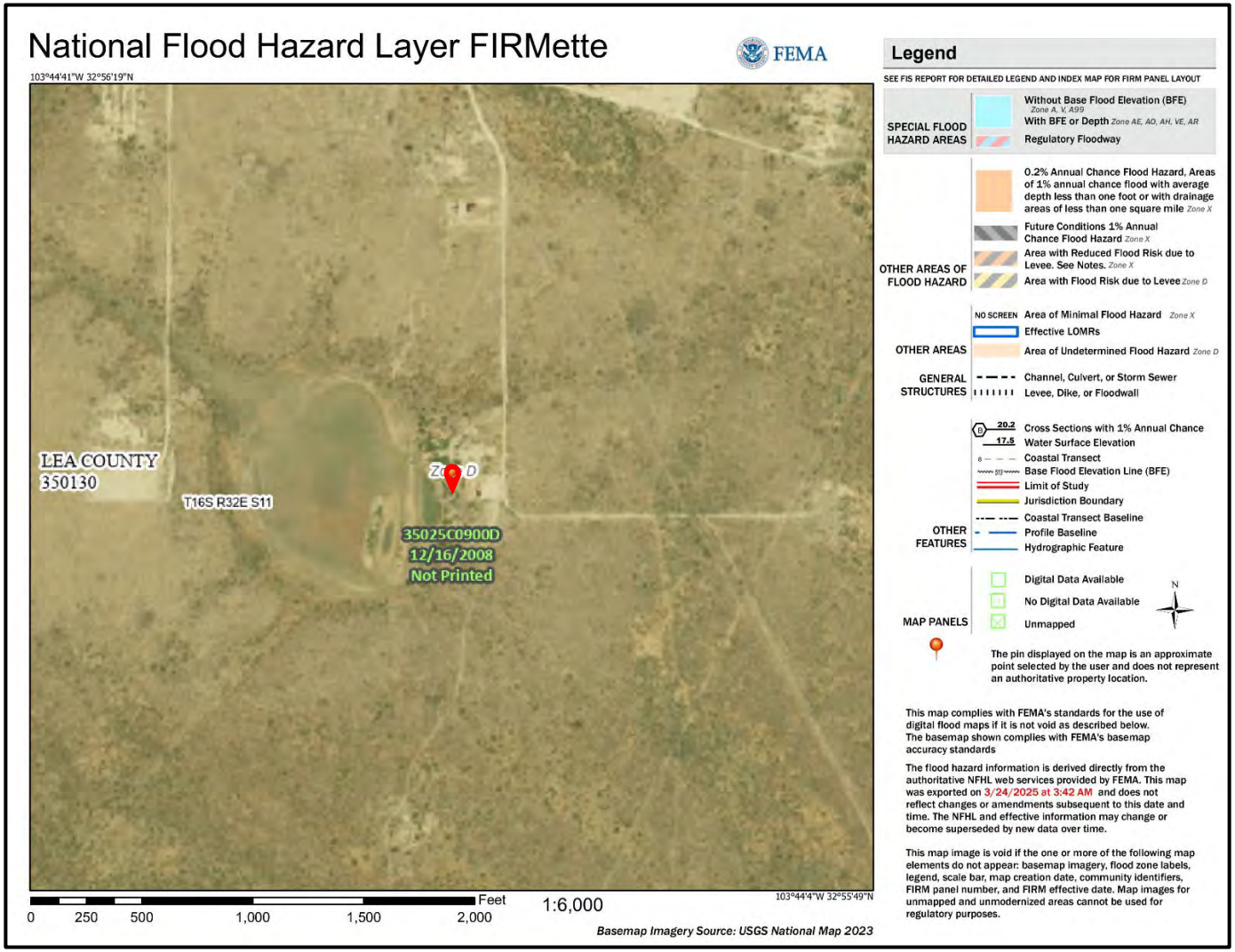
GPS: 32.934319° -103.739263°

Grain Environmental

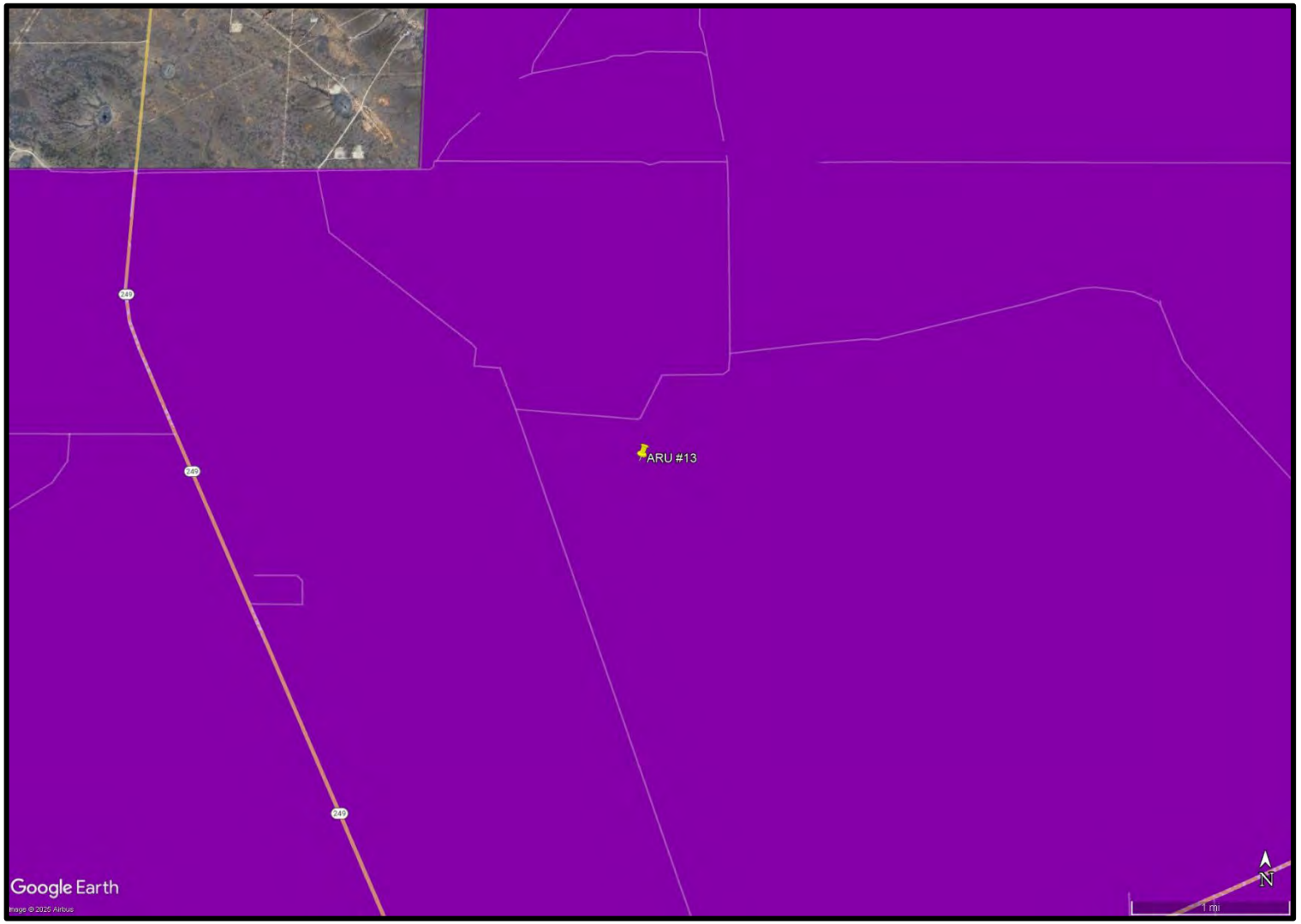
LEGEND: Site Location Water Well Location 0.5-Mile Radius Base Map From Google Earth Pro	**Figure 3** **Wellhead Protection Area Map** Grand Banks Energy Co. Anderson Ranch Unit #013 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: March 22, 2025 GPS: 32.934319° -103.739263°	Grain Environmental



LEGEND: Site Location Base Map From US Fish & Wildlife Service	**Figure 4** **National Wetlands Inventory Map** Grand Banks Energy Co. Anderson Ranch Unit #013 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: March 22, 2025 GPS: 32.934319° -103.739263°	Grain Environmental



LEGEND: Site Location Base Map From FEMA	**Figure 5** **FEMA Floodplain Map** Grand Banks Energy Co. Anderson Ranch Unit #013 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: March 22, 2025 GPS: 32.934319° -103.739263°



LEGEND: Low Karst Potential Medium Karst Potential High Karst Potential Base Map From Google Earth Pro and BLM	**Figure 6** **Karst Potential Map** Grand Banks Energy Co. Anderson Ranch Unit #013 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: March 22, 2025 GPS: 32.934319° -103.739263°	Grain Environmental

Grain Environmental

Appendix A: NMOCD Communication

Gmail Cindy Crain <cindy.crain@gmail.com>

Grand Banks Energy - Anderson Ranch Unit #013 (Incident #nAPP2426256273) - Extension Request

3 messages

Cindy Crain <cindy.crain@gmail.com> Sat, Dec 14, 2024 at 4:16 PM
To: "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>
Cc: Chris Gaddy <chris.gaddy@octane-energy.com>

Nelson,

Remediation is being conducted at the Grand Banks Energy (GBE) Anderson Ranch Unit (ARU) #013, but has not yet been completed and confirmation samples have not been collected.

As a Closure Report is due to the OCD by December 18, 2024, GBE respectfully requests a 90-day extension for submission of the Report. Every effort will be made to submit the Closure Report as soon as possible.

Please let me know if you have any questions, or if you approve the extension.

Thank you,
Cindy Crain
--
Crain Environmental
2925 East 17th Street
Odessa, TX 79761
(575) 441-7244

Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov> Mon, Dec 23, 2024 at 2:25 PM
To: Cindy Crain <cindy.crain@gmail.com>
Cc: Chris Gaddy <chris.gaddy@octane-energy.com>

Good afternoon Cindy,

Thank you for the inquiry.

The incident remediation closure report due date (RCRDD) had lapsed after June 27, 2024. In the future, please submit your requests prior to its RCRDD. Failure to do so may result in any request being denied.

Given the circumstance, your request for a 90-day time extension request date is approved from the today's date. The Remediation Due date has been updated to 03/24/2025.

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

The OCD requires a copy of all correspondence related to remedial activities be included in all proposals, weekly/monthly/quarterly/semi-annual/annual, or final closure reports. Correspondence reporting requirements may include, but not limited to, time extension requests, sample event notifications, and variance requests.

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

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

From: Cindy Crain <cindy.crain@gmail.com>
Sent: Saturday, December 14, 2024 3:16 PM
To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Cc: Chris Gaddy <chris.gaddy@octane-energy.com>
Subject: [EXTERNAL] Grand Banks Energy - Anderson Ranch Unit #013 (Incident #nAPP2426256273) - Extension Request

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

[Quoted text hidden]

Cindy Crain <cindy.crain@gmail.com> Mon, Dec 23, 2024 at 8:32 PM
To: "Velez, Nelson, EMNRD" <Nelson.Velez@emnrd.nm.gov>
Cc: Chris Gaddy <chris.gaddy@octane-energy.com>

Thank you, Nelson -

I will let you know if I have any questions.

Sincerely,
Cindy Crain
[Quoted text hidden]

Grain Environmental

Appendix B: Water Well Files

Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
	L 02846	SE	NE	NW	11	16S	32E	617956.0	3645413.0 *	

*** UTM location was derived from PLSS - see Help**

Driller License:	46	**Driller Company:**	ABBOTT BROTHERS COMPANY		
Driller Name:	CLYDE ABBOTT				
Drill Start Date:		**Drill Finish Date:**	1953-05-06	**Plug Date:**	
Log File Date:	1955-04-11	**PCW Rcv Date:**	1960-03-16	**Source:**	Shallow
Pump Type:	TURBIN	**Pipe Discharge Size:**	4	**Estimated Yield:**	60
Casing Size:	7.00	**Depth Well:**	328	**Depth Water:**	275

Water Bearing Stratifications:

Top	Bottom	Description
275	328	Sandstone/Gravel/Conglomerate

Casing Perforations:

Top	Bottom
275	328

Click to hideNews Bulletins

- Explore the *NEW* USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 325614103434001

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 325614103434001 16S.32E.11.24143

Lea County, New Mexico
Latitude 32°56'17", Longitude 103°43'52" NAD27
Land-surface elevation 4,301.00 feet above NGVD29
The depth of the well is 317 feet below land surface.
This well is completed in the High Plains aquifer (N100HGHPLN) national aquifer.
This well is completed in the Ogallala Formation (121OGLL) local aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement
1961-03-15		D	62610		4084.14	NGVD29	1	Z		
1961-03-15		D	62611		4085.84	NAVD88	1	Z		
1961-03-15		D	72019	216.86			1	Z		
1966-02-16		D	62610		4076.83	NGVD29	1	Z		
1966-02-16		D	62611		4078.53	NAVD88	1	Z		
1966-02-16		D	72019	224.17			1	Z		
1971-03-23		D	62610		4084.94	NGVD29	1	Z		
1971-03-23		D	62611		4086.64	NAVD88	1	Z		
1971-03-23		D	72019	216.06			1	Z		
1976-05-07		D	62610		4085.05	NGVD29	1	Z		
1976-05-07		D	62611		4086.75	NAVD88	1	Z		
1976-05-07		D	72019	215.95			1	Z		
1981-03-27		D	62610		4084.26	NGVD29	1	Z		
1981-03-27		D	62611		4085.96	NAVD88	1	Z		
1981-03-27		D	72019	216.74			1	Z		

Explanation

Section	Code	Description
Water-level date-time accuracy	D	Date is accurate to the Day
Parameter code	62610	Groundwater level above NGVD 1929, feet
Parameter code	62611	Groundwater level above NAVD 1988, feet
Parameter code	72019	Depth to water level, feet below land surface
Referenced vertical datum	NAVD88	North American Vertical Datum of 1988
Referenced vertical datum	NGVD29	National Geodetic Vertical Datum of 1929
Status	1	Static
Method of measurement	Z	Other.
Measuring agency		Not determined
Source of measurement		Not determined
Water-level approval status	A	Approved for publication -- Processing and review completed.

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Automated retrievals
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Data Tips
Explanation of terms
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Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey
Title: Groundwater for USA: Water Levels
URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2024-01-08 14:37:51 EST
0.38 0.29 nadww02

Grain Environmental

Appendix C: Laboratory Analytical Reports

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 3/29/2024 12:50:47 PM

JOB DESCRIPTION

Anderson Ranch Unit #13
Lea County NM

JOB NUMBER

880-40528-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

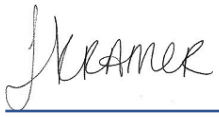
Eurofins Midland

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
3/29/2024 12:50:47 PM

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

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Laboratory Job ID: 880-40528-1
SDG: Lea County NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

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

HPLC/IC

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

Metals

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

General Chemistry

Qualifier	Qualifier Description
HF	Parameter with a holding time of 15 minutes. Test performed by laboratory at client's request. Sample was analyzed outside of hold time.
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: Anderson Ranch Unit #13

Job ID: 880-40528-1

Job ID: 880-40528-1 Eurofins Midland

Job Narrative
880-40528-1

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 are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

- Matrix QC may not be reported if insufficient sample 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 3/8/2024 2:30 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 1.7°C.

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-75297 and analytical batch 880-75462 was outside the upper control limits.

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

GC Semi VOA
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: The instrument blank/CCB for analytical batch 860-151762 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because associated sample(s) results were greater than 10X the value found in the instrument blank/CCB. The data have been reported.

Method 300_ORGFM_28D: The instrument blank/CCB for analytical batch 860-151762 contained Chloride greater than the method detection limit (MDL), and were not reanalyzed because none of the samples associated with this CCB contained the target compound. The data have been reported.

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

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

General Chemistry
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: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-1 (1')

Date Collected: 03/05/24 11:55
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-1
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 13:04	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 13:04	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 13:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 13:04	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 13:04	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 13:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:04*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/13/24 13:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**61.4**		49.6		mg/Kg			03/11/24 10:32	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		03/11/24 09:17	03/11/24 10:32	1
Diesel Range Organics (Over C10-C28)	**61.4**		49.6		mg/Kg		03/11/24 09:17	03/11/24 10:32	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		03/11/24 09:17	03/11/24 10:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*89*		*70 - 130*	*03/11/24 09:17*	*03/11/24 10:32*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/11/24 09:17*	*03/11/24 10:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**741**		25.2		mg/Kg			03/12/24 23:09	5

Client Sample ID: S-1 (2')

Date Collected: 03/05/24 11:59
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/11/24 14:34	03/13/24 13:25	1
Toluene	**0.00206**		0.00198		mg/Kg		03/11/24 14:34	03/13/24 13:25	1
Ethylbenzene	**0.00233**		0.00198		mg/Kg		03/11/24 14:34	03/13/24 13:25	1
m-Xylene & p-Xylene	**0.00754**		0.00396		mg/Kg		03/11/24 14:34	03/13/24 13:25	1
o-Xylene	**0.00561**		0.00198		mg/Kg		03/11/24 14:34	03/13/24 13:25	1
Xylenes, Total	**0.0132**		0.00396		mg/Kg		03/11/24 14:34	03/13/24 13:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:25*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:25*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-1 (2')
Date Collected: 03/05/24 11:59
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-2
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0175		0.00396		mg/Kg			03/13/24 13:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	114		50.5		mg/Kg			03/11/24 11:36	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		03/11/24 09:17	03/11/24 11:36	1
Diesel Range Organics (Over C10-C28)	114		50.5		mg/Kg		03/11/24 09:17	03/11/24 11:36	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/11/24 09:17	03/11/24 11:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/11/24 09:17*	*03/11/24 11:36*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/11/24 09:17*	*03/11/24 11:36*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	515		5.01		mg/Kg			03/11/24 13:25	1

Client Sample ID: S-2 (T-1) 1'
Date Collected: 03/05/24 11:50
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-3
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	849		9.98		mg/Kg		03/26/24 17:05	03/28/24 10:43	1

Method: LA 29B SAR - Sodium Adsorption Ratio

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	4.56		0.100		NONE		03/14/24 17:36	03/15/24 15:11	1
Exchangeable Sodium Percentage	5.18		0.100		%		03/14/24 17:36	03/15/24 15:11	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.7	HF			SU			03/13/24 16:00	1
Temperature (SW846 9045D)	21.2	HF			Deg. C			03/13/24 16:00	1
Electrical Conductivity (SM 2510B)	4.31		0.0100		ds/m			03/13/24 15:48	1

Client Sample ID: S-3 (T-2) 1'
Date Collected: 03/05/24 11:53
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/24 17:05	03/28/24 13:28	1

Method: LA 29B SAR - Sodium Adsorption Ratio

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium Adsorption Ratio	<0.100	U	0.100		NONE		03/14/24 17:36	03/15/24 15:11	1

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-3 (T-2) 1'

Lab Sample ID: 880-40528-4
Matrix: Solid
Date Collected: 03/05/24 11:53
Date Received: 03/08/24 14:30

Method: LA 29B SAR - Sodium Adsorption Ratio (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Exchangeable Sodium Percentage	<0.100	U	0.100		%		03/14/24 17:36	03/15/24 15:11	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	**8.5**	**HF**			SU			03/12/24 14:38	1
Temperature (SW846 9045D)	**21.2**	**HF**			Deg. C			03/12/24 14:38	1
Electrical Conductivity (SM 2510B)	**0.157**		0.0100		ds/m			03/13/24 15:48	1

Client Sample ID: S-4 (1')

Lab Sample ID: 880-40528-5
Matrix: Solid
Date Collected: 03/05/24 12:15
Date Received: 03/08/24 14:30

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		03/11/24 14:34	03/13/24 13:45	1
Toluene	**0.00301**		0.00201		mg/Kg		03/11/24 14:34	03/13/24 13:45	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		03/11/24 14:34	03/13/24 13:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		03/11/24 14:34	03/13/24 13:45	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		03/11/24 14:34	03/13/24 13:45	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		03/11/24 14:34	03/13/24 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:45*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*03/11/24 14:34*	*03/13/24 13:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			03/13/24 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**50.3**		49.7		mg/Kg			03/11/24 11:58	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		03/11/24 09:17	03/11/24 11:58	1
Diesel Range Organics (Over C10-C28)	**50.3**		49.7		mg/Kg		03/11/24 09:17	03/11/24 11:58	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		03/11/24 09:17	03/11/24 11:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/11/24 09:17*	*03/11/24 11:58*	*1*
o-Terphenyl	*93*		*70 - 130*	*03/11/24 09:17*	*03/11/24 11:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41.0**		4.97		mg/Kg			03/11/24 13:29	1

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-4 (2')
Date Collected: 03/05/24 12:20
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		03/11/24 14:34	03/13/24 14:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		03/11/24 14:34	03/13/24 14:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		03/11/24 14:34	03/13/24 14:05	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		03/11/24 14:34	03/13/24 14:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		03/11/24 14:34	03/13/24 14:05	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		03/11/24 14:34	03/13/24 14:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:05*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403		mg/Kg			03/13/24 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			03/11/24 12:19	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	<49.9	U	49.9		mg/Kg		03/11/24 09:17	03/11/24 12:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		03/11/24 09:17	03/11/24 12:19	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/11/24 09:17	03/11/24 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/11/24 09:17*	*03/11/24 12:19*	*1*
o-Terphenyl	*96*		*70 - 130*	*03/11/24 09:17*	*03/11/24 12:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**94.3**		4.99		mg/Kg			03/11/24 13:34	1

Client Sample ID: S-5 (1')
Date Collected: 03/05/24 12:03
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-7
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 14:26	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 14:26	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 14:26	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 14:26	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 14:26	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 14:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:26*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:26*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-5 (1')

Date Collected: 03/05/24 12:03
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-7
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/13/24 14:26	1

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			03/11/24 12:40	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		03/11/24 09:17	03/11/24 12:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		03/11/24 09:17	03/11/24 12:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		03/11/24 09:17	03/11/24 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*115*		*70 - 130*	*03/11/24 09:17*	*03/11/24 12:40*	*1*
o-Terphenyl	*123*		*70 - 130*	*03/11/24 09:17*	*03/11/24 12:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**87.3**		5.03		mg/Kg			03/11/24 13:47	1

Client Sample ID: S-5 (2')

Date Collected: 03/05/24 12:07
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-8
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		03/11/24 14:34	03/13/24 14:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		03/11/24 14:34	03/13/24 14:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		03/11/24 14:34	03/13/24 14:46	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		03/11/24 14:34	03/13/24 14:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		03/11/24 14:34	03/13/24 14:46	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		03/11/24 14:34	03/13/24 14:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:46*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*03/11/24 14:34*	*03/13/24 14:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			03/13/24 14:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			03/11/24 13:01	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	<50.2	U	50.2		mg/Kg		03/11/24 09:17	03/11/24 13:01	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		03/11/24 09:17	03/11/24 13:01	1

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-5 (2')
Date Collected: 03/05/24 12:07
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-8
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		03/11/24 09:17	03/11/24 13:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:01*	*1*
o-Terphenyl	*107*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49.9**		5.01		mg/Kg			03/11/24 13:51	1

Client Sample ID: S-6 (1')
Date Collected: 03/05/24 11:44
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-9
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 15:07	1
Toluene	**0.00238**		0.00200		mg/Kg		03/11/24 14:34	03/13/24 15:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 15:07	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/11/24 14:34	03/13/24 15:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 15:07	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		03/11/24 14:34	03/13/24 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*03/11/24 14:34*	*03/13/24 15:07*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*03/11/24 14:34*	*03/13/24 15:07*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			03/13/24 15:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**339**		50.4		mg/Kg			03/11/24 13:23	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		03/11/24 09:17	03/11/24 13:23	1
Diesel Range Organics (Over C10-C28)	**339**		50.4		mg/Kg		03/11/24 09:17	03/11/24 13:23	1
Oll Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		03/11/24 09:17	03/11/24 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*91*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:23*	*1*
o-Terphenyl	*95*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:23*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**178**		5.02		mg/Kg			03/11/24 14:05	1

Client Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-6 (2')
Date Collected: 03/05/24 11:48
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-10
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 15:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 15:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 15:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 15:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		03/11/24 14:34	03/13/24 15:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		03/11/24 14:34	03/13/24 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*03/11/24 14:34*	*03/13/24 15:27*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*03/11/24 14:34*	*03/13/24 15:27*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			03/13/24 15:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**356**		50.5		mg/Kg			03/11/24 13:45	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	<50.5	U	50.5		mg/Kg		03/11/24 09:17	03/11/24 13:45	1
Diesel Range Organics (Over C10-C28)	**356**		50.5		mg/Kg		03/11/24 09:17	03/11/24 13:45	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		03/11/24 09:17	03/11/24 13:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:45*	*1*
o-Terphenyl	*91*		*70 - 130*	*03/11/24 09:17*	*03/11/24 13:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**270**		4.97		mg/Kg			03/11/24 14:09	1

Surrogate Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-40528-1	S-1 (1')	88	99
880-40528-1 MS	S-1 (1')	107	109
880-40528-1 MSD	S-1 (1')	108	106
880-40528-2	S-1 (2')	102	97
880-40528-5	S-4 (1')	105	111
880-40528-6	S-4 (2')	118	108
880-40528-7	S-5 (1')	118	109
880-40528-8	S-5 (2')	123	108
880-40528-9	S-6 (1')	118	103
880-40528-10	S-6 (2')	116	104
LCS 880-75297/1-A	Lab Control Sample	99	95
LCSD 880-75297/2-A	Lab Control Sample Dup	107	102
MB 880-75297/5-A	Method Blank	144 S1+	128

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-40528-1	S-1 (1')	89	96
880-40528-1 MS	S-1 (1')	93	89
880-40528-1 MSD	S-1 (1')	91	87
880-40528-2	S-1 (2')	88	93
880-40528-5	S-4 (1')	88	93
880-40528-6	S-4 (2')	91	96
880-40528-7	S-5 (1')	115	123
880-40528-8	S-5 (2')	100	107
880-40528-9	S-6 (1')	91	95
880-40528-10	S-6 (2')	85	91
LCS 880-75212/2-A	Lab Control Sample	89	98
LCSD 880-75212/3-A	Lab Control Sample Dup	84	91
MB 880-75212/1-A	Method Blank	88	99

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-75297/5-A
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75297

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 12:35	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 12:35	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 12:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/11/24 14:34	03/13/24 12:35	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/11/24 14:34	03/13/24 12:35	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/11/24 14:34	03/13/24 12:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*144*	*S1+*	*70 - 130*	*03/11/24 14:34*	*03/13/24 12:35*	*1*
1,4-Difluorobenzene (Surr)	*128*		*70 - 130*	*03/11/24 14:34*	*03/13/24 12:35*	*1*

Lab Sample ID: LCS 880-75297/1-A
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1171		mg/Kg		117	70 - 130
Toluene	0.100	0.1079		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1197		mg/Kg		120	70 - 130
m-Xylene & p-Xylene	0.200	0.2198		mg/Kg		110	70 - 130
o-Xylene	0.100	0.1030		mg/Kg		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-75297/2-A
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1184		mg/Kg		118	70 - 130	1	35
Toluene	0.100	0.1046		mg/Kg		105	70 - 130	3	35
Ethylbenzene	0.100	0.1112		mg/Kg		111	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2355		mg/Kg		118	70 - 130	7	35
o-Xylene	0.100	0.1116		mg/Kg		112	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

Lab Sample ID: 880-40528-1 MS
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0996	0.1000		mg/Kg		100	70 - 130
Toluene	<0.00199	U	0.0996	0.08739		mg/Kg		87	70 - 130

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QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: 8021B - Volatile Organic Compounds (GC) (Continued)

Lab Sample ID: 880-40528-1 MS
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0996	0.07601		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1753		mg/Kg		88	70 - 130
o-Xylene	<0.00199	U	0.0996	0.08741		mg/Kg		87	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 880-40528-1 MSD
Matrix: Solid
Analysis Batch: 75462

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 75297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.100	0.1141		mg/Kg		114	70 - 130	13	35
Toluene	<0.00199	U	0.100	0.09425		mg/Kg		93	70 - 130	8	35
Ethylbenzene	<0.00199	U	0.100	0.08847		mg/Kg		88	70 - 130	15	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1746		mg/Kg		87	70 - 130	0	35
o-Xylene	<0.00199	U	0.100	0.08605		mg/Kg		85	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*106*		*70 - 130*

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

Lab Sample ID: MB 880-75212/1-A
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 75212

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		03/11/24 07:45	03/11/24 08:02	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/11/24 07:45	03/11/24 08:02	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/11/24 07:45	03/11/24 08:02	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*03/11/24 07:45*	*03/11/24 08:02*	*1*
o-Terphenyl	*99*		*70 - 130*	*03/11/24 07:45*	*03/11/24 08:02*	*1*

Lab Sample ID: LCS 880-75212/2-A
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75212

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1009		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1045		mg/Kg		104	70 - 130

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QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

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

Lab Sample ID: LCS 880-75212/2-A
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 75212

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	98		70 - 130

Lab Sample ID: LCSD 880-75212/3-A
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 75212

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	987.5		mg/Kg		99	70 - 130	2	20
Diesel Range Organics (Over C10-C28)			1000	980.8		mg/Kg		98	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	84		70 - 130
o-Terphenyl	91		70 - 130

Lab Sample ID: 880-40528-1 MS
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 75212

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	1010	862.8		mg/Kg		83	70 - 130
Diesel Range Organics (Over C10-C28)	61.4		1010	864.4		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-40528-1 MSD
Matrix: Solid
Analysis Batch: 75200

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 75212

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	<49.6	U	1010	857.5		mg/Kg		83	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	61.4		1010	841.0		mg/Kg		77	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	87		70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 860-151711/28-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 151711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/24 17:05	03/27/24 17:44	1

Lab Sample ID: MB 860-151711/55-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 151711

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg		03/26/24 17:05	03/28/24 11:37	1

Lab Sample ID: LCS 860-151711/29-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.65		mg/Kg		97	80 - 120

Lab Sample ID: LCS 860-151711/56-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	100	96.28		mg/Kg		96	80 - 120

Lab Sample ID: LCSD 860-151711/30-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.82		mg/Kg		97	80 - 120	0	20

Lab Sample ID: LCSD 860-151711/57-A
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	100	96.51		mg/Kg		97	80 - 120	0	20

Lab Sample ID: 880-40528-4 MS
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: S-3 (T-2) 1'
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	<10.0	U	101	97.79		mg/Kg		92	80 - 120

Lab Sample ID: 880-40528-4 MSD
Matrix: Solid
Analysis Batch: 151762

Client Sample ID: S-3 (T-2) 1'
Prep Type: Total/NA
Prep Batch: 151711

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<10.0	U	100	97.68		mg/Kg		92	80 - 120	0	15

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QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-75203/1-A
Matrix: Solid
Analysis Batch: 75240

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			03/11/24 12:18	1

Lab Sample ID: LCS 880-75203/2-A
Matrix: Solid
Analysis Batch: 75240

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.0		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-75203/3-A
Matrix: Solid
Analysis Batch: 75240

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	257.5		mg/Kg		103	90 - 110	8	20

Lab Sample ID: 880-40528-6 MS
Matrix: Solid
Analysis Batch: 75240

Client Sample ID: S-4 (2')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	94.3		250	344.5		mg/Kg		100	90 - 110

Lab Sample ID: 880-40528-6 MSD
Matrix: Solid
Analysis Batch: 75240

Client Sample ID: S-4 (2')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	94.3		250	366.6		mg/Kg		109	90 - 110	6	20

Lab Sample ID: MB 880-75204/1-A
Matrix: Solid
Analysis Batch: 75420

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			03/12/24 21:15	1

Lab Sample ID: LCS 880-75204/2-A
Matrix: Solid
Analysis Batch: 75420

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	254.7		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-75204/3-A
Matrix: Solid
Analysis Batch: 75420

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	253.7		mg/Kg		101	90 - 110	0	20

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QC Sample Results

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-149578/2-A
Matrix: Solid
Analysis Batch: 149579

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Electrical Conductivity	<0.0100	U	0.0100		ds/m			03/13/24 15:48	1

QC Association Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

GC VOA

Prep Batch: 75297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	5035	
880-40528-2	S-1 (2')	Total/NA	Solid	5035	
880-40528-5	S-4 (1')	Total/NA	Solid	5035	
880-40528-6	S-4 (2')	Total/NA	Solid	5035	
880-40528-7	S-5 (1')	Total/NA	Solid	5035	
880-40528-8	S-5 (2')	Total/NA	Solid	5035	
880-40528-9	S-6 (1')	Total/NA	Solid	5035	
880-40528-10	S-6 (2')	Total/NA	Solid	5035	
MB 880-75297/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-75297/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-75297/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-40528-1 MS	S-1 (1')	Total/NA	Solid	5035	
880-40528-1 MSD	S-1 (1')	Total/NA	Solid	5035	

Analysis Batch: 75462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	8021B	75297
880-40528-2	S-1 (2')	Total/NA	Solid	8021B	75297
880-40528-5	S-4 (1')	Total/NA	Solid	8021B	75297
880-40528-6	S-4 (2')	Total/NA	Solid	8021B	75297
880-40528-7	S-5 (1')	Total/NA	Solid	8021B	75297
880-40528-8	S-5 (2')	Total/NA	Solid	8021B	75297
880-40528-9	S-6 (1')	Total/NA	Solid	8021B	75297
880-40528-10	S-6 (2')	Total/NA	Solid	8021B	75297
MB 880-75297/5-A	Method Blank	Total/NA	Solid	8021B	75297
LCS 880-75297/1-A	Lab Control Sample	Total/NA	Solid	8021B	75297
LCSD 880-75297/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	75297
880-40528-1 MS	S-1 (1')	Total/NA	Solid	8021B	75297
880-40528-1 MSD	S-1 (1')	Total/NA	Solid	8021B	75297

Analysis Batch: 75614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	Total BTEX	
880-40528-2	S-1 (2')	Total/NA	Solid	Total BTEX	
880-40528-5	S-4 (1')	Total/NA	Solid	Total BTEX	
880-40528-6	S-4 (2')	Total/NA	Solid	Total BTEX	
880-40528-7	S-5 (1')	Total/NA	Solid	Total BTEX	
880-40528-8	S-5 (2')	Total/NA	Solid	Total BTEX	
880-40528-9	S-6 (1')	Total/NA	Solid	Total BTEX	
880-40528-10	S-6 (2')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 75200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	8015B NM	75212
880-40528-2	S-1 (2')	Total/NA	Solid	8015B NM	75212
880-40528-5	S-4 (1')	Total/NA	Solid	8015B NM	75212
880-40528-6	S-4 (2')	Total/NA	Solid	8015B NM	75212
880-40528-7	S-5 (1')	Total/NA	Solid	8015B NM	75212
880-40528-8	S-5 (2')	Total/NA	Solid	8015B NM	75212

QC Association Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

GC Semi VOA (Continued)

Analysis Batch: 75200 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-9	S-6 (1')	Total/NA	Solid	8015B NM	75212
880-40528-10	S-6 (2')	Total/NA	Solid	8015B NM	75212
MB 880-75212/1-A	Method Blank	Total/NA	Solid	8015B NM	75212
LCS 880-75212/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	75212
LCSD 880-75212/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	75212
880-40528-1 MS	S-1 (1')	Total/NA	Solid	8015B NM	75212
880-40528-1 MSD	S-1 (1')	Total/NA	Solid	8015B NM	75212

Prep Batch: 75212

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	8015NM Prep	
880-40528-2	S-1 (2')	Total/NA	Solid	8015NM Prep	
880-40528-5	S-4 (1')	Total/NA	Solid	8015NM Prep	
880-40528-6	S-4 (2')	Total/NA	Solid	8015NM Prep	
880-40528-7	S-5 (1')	Total/NA	Solid	8015NM Prep	
880-40528-8	S-5 (2')	Total/NA	Solid	8015NM Prep	
880-40528-9	S-6 (1')	Total/NA	Solid	8015NM Prep	
880-40528-10	S-6 (2')	Total/NA	Solid	8015NM Prep	
MB 880-75212/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-75212/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-75212/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-40528-1 MS	S-1 (1')	Total/NA	Solid	8015NM Prep	
880-40528-1 MSD	S-1 (1')	Total/NA	Solid	8015NM Prep	

Analysis Batch: 75399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Total/NA	Solid	8015 NM	
880-40528-2	S-1 (2')	Total/NA	Solid	8015 NM	
880-40528-5	S-4 (1')	Total/NA	Solid	8015 NM	
880-40528-6	S-4 (2')	Total/NA	Solid	8015 NM	
880-40528-7	S-5 (1')	Total/NA	Solid	8015 NM	
880-40528-8	S-5 (2')	Total/NA	Solid	8015 NM	
880-40528-9	S-6 (1')	Total/NA	Solid	8015 NM	
880-40528-10	S-6 (2')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 75203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-2	S-1 (2')	Soluble	Solid	DI Leach	
880-40528-5	S-4 (1')	Soluble	Solid	DI Leach	
880-40528-6	S-4 (2')	Soluble	Solid	DI Leach	
880-40528-7	S-5 (1')	Soluble	Solid	DI Leach	
880-40528-8	S-5 (2')	Soluble	Solid	DI Leach	
880-40528-9	S-6 (1')	Soluble	Solid	DI Leach	
880-40528-10	S-6 (2')	Soluble	Solid	DI Leach	
MB 880-75203/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-75203/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-75203/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-40528-6 MS	S-4 (2')	Soluble	Solid	DI Leach	
880-40528-6 MSD	S-4 (2')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

HPLC/IC

Leach Batch: 75204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Soluble	Solid	DI Leach	
MB 880-75204/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-75204/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-75204/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 75240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-2	S-1 (2')	Soluble	Solid	300.0	75203
880-40528-5	S-4 (1')	Soluble	Solid	300.0	75203
880-40528-6	S-4 (2')	Soluble	Solid	300.0	75203
880-40528-7	S-5 (1')	Soluble	Solid	300.0	75203
880-40528-8	S-5 (2')	Soluble	Solid	300.0	75203
880-40528-9	S-6 (1')	Soluble	Solid	300.0	75203
880-40528-10	S-6 (2')	Soluble	Solid	300.0	75203
MB 880-75203/1-A	Method Blank	Soluble	Solid	300.0	75203
LCS 880-75203/2-A	Lab Control Sample	Soluble	Solid	300.0	75203
LCSD 880-75203/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	75203
880-40528-6 MS	S-4 (2')	Soluble	Solid	300.0	75203
880-40528-6 MSD	S-4 (2')	Soluble	Solid	300.0	75203

Analysis Batch: 75420

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-1	S-1 (1')	Soluble	Solid	300.0	75204
MB 880-75204/1-A	Method Blank	Soluble	Solid	300.0	75204
LCS 880-75204/2-A	Lab Control Sample	Soluble	Solid	300.0	75204
LCSD 880-75204/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	75204

Prep Batch: 151711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Total/NA	Solid	300_Prep	
880-40528-4	S-3 (T-2) 1'	Total/NA	Solid	300_Prep	
MB 860-151711/28-A	Method Blank	Total/NA	Solid	300_Prep	
MB 860-151711/55-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-151711/29-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCS 860-151711/56-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-151711/30-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
LCSD 860-151711/57-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	
880-40528-4 MS	S-3 (T-2) 1'	Total/NA	Solid	300_Prep	
880-40528-4 MSD	S-3 (T-2) 1'	Total/NA	Solid	300_Prep	

Analysis Batch: 151762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Total/NA	Solid	300.0	151711
880-40528-4	S-3 (T-2) 1'	Total/NA	Solid	300.0	151711
MB 860-151711/28-A	Method Blank	Total/NA	Solid	300.0	151711
MB 860-151711/55-A	Method Blank	Total/NA	Solid	300.0	151711
LCS 860-151711/29-A	Lab Control Sample	Total/NA	Solid	300.0	151711
LCS 860-151711/56-A	Lab Control Sample	Total/NA	Solid	300.0	151711
LCSD 860-151711/30-A	Lab Control Sample Dup	Total/NA	Solid	300.0	151711
LCSD 860-151711/57-A	Lab Control Sample Dup	Total/NA	Solid	300.0	151711
880-40528-4 MS	S-3 (T-2) 1'	Total/NA	Solid	300.0	151711

QC Association Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

HPLC/IC (Continued)

Analysis Batch: 151762 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-4 MSD	S-3 (T-2) 1'	Total/NA	Solid	300.0	151711

Metals

Prep Batch: 149822

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Total/NA	Solid	29B	
880-40528-4	S-3 (T-2) 1'	Total/NA	Solid	29B	

Prep Batch: 149844

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Total/NA	Solid	29B	149822
880-40528-4	S-3 (T-2) 1'	Total/NA	Solid	29B	149822

Analysis Batch: 149996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Total/NA	Solid	29B SAR	149844
880-40528-4	S-3 (T-2) 1'	Total/NA	Solid	29B SAR	149844

General Chemistry

Leach Batch: 149330

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-4	S-3 (T-2) 1'	Soluble	Solid	DI Leach	

Analysis Batch: 149366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-4	S-3 (T-2) 1'	Soluble	Solid	9045D	149330

Leach Batch: 149523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Soluble	Solid	DI Leach	

Leach Batch: 149578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Soluble	Solid	DI Leach	
880-40528-4	S-3 (T-2) 1'	Soluble	Solid	DI Leach	
MB 860-149578/2-A	Method Blank	Soluble	Solid	DI Leach	
LCS 860-149578/3-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 860-149578/4-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 149579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Soluble	Solid	SM 2510B	149578
880-40528-4	S-3 (T-2) 1'	Soluble	Solid	SM 2510B	149578
MB 860-149578/2-A	Method Blank	Soluble	Solid	SM 2510B	149578
LCS 860-149578/3-A	Lab Control Sample	Soluble	Solid	SM 2510B	149578
LCSD 860-149578/4-A	Lab Control Sample Dup	Soluble	Solid	SM 2510B	149578

Analysis Batch: 149583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40528-3	S-2 (T-1) 1'	Soluble	Solid	9045D	149523

Lab Chronicle

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-1 (1')
Date Collected: 03/05/24 11:55
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-1
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	5035			5.02 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 13:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 13:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 10:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 10:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	75204	03/11/24 08:35	SA	EET MID
Soluble	Analysis	300.0		5			75420	03/12/24 23:09	CH	EET MID

Client Sample ID: S-1 (2')
Date Collected: 03/05/24 11:59
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-2
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	5035			5.05 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 13:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 13:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 11:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 11:36	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 13:25	CH	EET MID

Client Sample ID: S-2 (T-1) 1'
Date Collected: 03/05/24 11:50
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-3
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	300_Prep			5.01 g	50 mL	151711	03/26/24 17:05	HN	EET HOU
Total/NA	Analysis	300.0		1			151762	03/28/24 10:43	RBNS	EET HOU
Total/NA	Prep	29B			45 g	40 g	149822	03/14/24 17:36	PB	EET HOU
Total/NA	Prep	29B			30.01 g	30 mL	149844	03/14/24 20:08	PB	EET HOU
Total/NA	Analysis	29B SAR		1			149996	03/15/24 15:11	JDM	EET HOU
Soluble	Leach	DI Leach			20 g	20 mL	149523	03/13/24 11:48	SCI	EET HOU
Soluble	Analysis	9045D		1	20 g	20 mL	149583	03/13/24 16:00	SCI	EET HOU
Soluble	Leach	DI Leach			30 g	30 mL	149578	03/13/24 15:40	SCI	EET HOU
Soluble	Analysis	SM 2510B		1			149579	03/13/24 15:48	SCI	EET HOU

Client Sample ID: S-3 (T-2) 1'
Date Collected: 03/05/24 11:53
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-4
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	300_Prep			4.99 g	50 mL	151711	03/26/24 17:05	HN	EET HOU
Total/NA	Analysis	300.0		1			151762	03/28/24 13:28	RBNS	EET HOU

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-3 (T-2) 1'
Date Collected: 03/05/24 11:53
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-4
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	29B			40 g	40 g	149822	03/14/24 17:36	PB	EET HOU
Total/NA	Prep	29B			30.05 g	30 mL	149844	03/14/24 20:08	PB	EET HOU
Total/NA	Analysis	29B SAR		1			149996	03/15/24 15:11	JDM	EET HOU
Soluble	Leach	DI Leach			20 g	20 mL	149330	03/12/24 12:59	SCI	EET HOU
Soluble	Analysis	9045D		1	20 g	20 mL	149366	03/12/24 14:38	SCI	EET HOU
Soluble	Leach	DI Leach			30 g	30 mL	149578	03/13/24 15:40	SCI	EET HOU
Soluble	Analysis	SM 2510B		1			149579	03/13/24 15:48	SCI	EET HOU

Client Sample ID: S-4 (1')
Date Collected: 03/05/24 12:15
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-5
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	5035			4.97 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 13:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 13:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 11:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 11:58	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 13:29	CH	EET MID

Client Sample ID: S-4 (2')
Date Collected: 03/05/24 12:20
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-6
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	5035			4.96 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 12:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 12:19	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 13:34	CH	EET MID

Client Sample ID: S-5 (1')
Date Collected: 03/05/24 12:03
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-7
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	5035			5.03 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 14:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 14:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 12:40	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-5 (1')
Date Collected: 03/05/24 12:03
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-7
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	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 12:40	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 13:47	CH	EET MID

Client Sample ID: S-5 (2')
Date Collected: 03/05/24 12:07
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-8
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	5035			5.04 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 14:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 14:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 13:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 13:01	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 13:51	CH	EET MID

Client Sample ID: S-6 (1')
Date Collected: 03/05/24 11:44
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-9
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	5035			4.99 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 15:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 15:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 13:23	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 13:23	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 14:05	CH	EET MID

Client Sample ID: S-6 (2')
Date Collected: 03/05/24 11:48
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-10
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	5035			5.02 g	5 mL	75297	03/11/24 14:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	75462	03/13/24 15:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			75614	03/13/24 15:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			75399	03/11/24 13:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	75212	03/11/24 09:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75200	03/11/24 13:45	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Client Sample ID: S-6 (2')

Date Collected: 03/05/24 11:48
Date Received: 03/08/24 14:30

Lab Sample ID: 880-40528-10

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	75203	03/11/24 08:30	SA	EET MID
Soluble	Analysis	300.0		1			75240	03/11/24 14:09	CH	EET MID

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200

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

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County 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	T104704400-23-26	06-30-24

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
Total BTEX		Solid	Total BTEX

Laboratory: Eurofins Houston

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	Identification Number	Expiration Date
Arkansas DEQ	State	88-00759	08-03-24
Florida	NELAP	E871002	06-30-24
Louisiana (All)	NELAP	03054	06-30-24
Oklahoma	NELAP	1306	08-31-24
Oklahoma	State	2023-139	08-31-24
Texas	NELAP	T104704215	06-30-24
Texas	TCEQ Water Supply	T104704215	12-28-25
USDA	US Federal Programs	525-23-79-79507	03-20-26

Method Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
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 HOU
300.0	Anions, Ion Chromatography	EPA	EET MID
29B SAR	Sodium Adsorption Ratio	LA	EET HOU
9045D	pH	SW846	EET HOU
SM 2510B	Conductivity, Specific Conductance	SM	EET HOU
29B	Preparation, Dry, Grind and Sieve	LA	EET HOU
29B	Preparation, Sodium Absorption Ratio	LA	EET HOU
300_Prep	Anions, Ion Chromatography, 10% Wt/Vol	EPA	EET HOU
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET HOU
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International
EPA = US Environmental Protection Agency
LA = Statewide Order No. 29-B, State Of Louisianna
SM = "Standard Methods For The Examination Of Water And Wastewater"
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

EET HOU = Eurofins Houston, 4145 Greenbriar Dr, Stafford, TX 77477, TEL (281)240-4200
EET MID = Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440

Sample Summary

Client: Crain Environmental
Project/Site: Anderson Ranch Unit #13

Job ID: 880-40528-1
SDG: Lea County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-40528-1	S-1 (1')	Solid	03/05/24 11:55	03/08/24 14:30
880-40528-2	S-1 (2')	Solid	03/05/24 11:59	03/08/24 14:30
880-40528-3	S-2 (T-1) 1'	Solid	03/05/24 11:50	03/08/24 14:30
880-40528-4	S-3 (T-2) 1'	Solid	03/05/24 11:53	03/08/24 14:30
880-40528-5	S-4 (1')	Solid	03/05/24 12:15	03/08/24 14:30
880-40528-6	S-4 (2')	Solid	03/05/24 12:20	03/08/24 14:30
880-40528-7	S-5 (1')	Solid	03/05/24 12:03	03/08/24 14:30
880-40528-8	S-5 (2')	Solid	03/05/24 12:07	03/08/24 14:30
880-40528-9	S-6 (1')	Solid	03/05/24 11:44	03/08/24 14:30
880-40528-10	S-6 (2')	Solid	03/05/24 11:48	03/08/24 14:30

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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

880-40528 Chain of Custody

www.xenco.com Page 1 of 1

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane Energy
Address:	2925 E. 17th St.	Address:	310 W. Wall, Ste. 300
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79701
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:	Anderson Ranch Unit #13	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:	-1.0	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.8	
Total Containers:		Corrected Temperature:	1.7	

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 8015 M	BTEX	Chlorides	EC	SAR	ESP	pH	Sample Comments
S-1 (1')	S	3/5/24	1155	1'	G	1		X	X	X					
S-1 (2')			1159	2'		1		X	X	X					
S-2 (T-1) 1'			1150	1'		2				X	X	X	X	X	
S-3 (T-2) 1'			1153	1'		2				X	X	X	X	X	
S-4 (1')			1215	1'		1		X	X	X					
S-4 (2')			1220	2'		1		X	X	X					
S-5 (1')			1203	1'		1		X	X	X					
S-5 (2')			1207	2'		1		X	X	X					
S-6 (1')			1144	1'		1		X	X	X					
S-6 (2')			1148	2'		1		X	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		03-08-24	2		
3		14:30	4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-40528-1
SDG Number: Lea County NM

Login Number: 40528
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Midland

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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.	True	
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	

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-40528-1
SDG Number: Lea County NM

Login Number: 40528
List Number: 2
Creator: Baker, Jeremiah

List Source: Eurofins Houston
List Creation: 03/09/24 11:28 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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.	True	
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").	True	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 10/4/2024 2:44:58 PM

JOB DESCRIPTION

ARU #13
Lea Co., NM

JOB NUMBER

880-49110-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

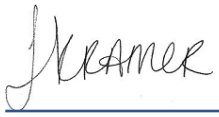
Eurofins Midland

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
10/4/2024 2:44:58 PM

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

Client: Crain Environmental
Project/Site: ARU #13

Laboratory Job ID: 880-49110-1
SDG: Lea Co., NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Qualifiers

GC VOA

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

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, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
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: ARU #13

Job ID: 880-49110-1

Job ID: 880-49110-1 Eurofins Midland

Job Narrative
880-49110-1

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 9/27/2024 1:45 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 3.1°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (0-6") (880-49110-1), S-1 (1') (880-49110-2), S-1 (3') (880-49110-3), S-6 (0-6") (880-49110-4), S-6 (1') (880-49110-5), S-6 (3') (880-49110-6), S-7 (0-6") (880-49110-7), S-7 (1') (880-49110-8), S-7 (2.5') (880-49110-9), S-8 (0-6") (880-49110-10), S-8 (1') (880-49110-11), S-8 (2.5') (880-49110-12), S-9 (0-6") (880-49110-13), S-9 (1') (880-49110-14) and S-9 (3') (880-49110-15).

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

Diesel Range Organics
Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-92042/2-A) and (LCSD 880-92042/3-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-92042 and analytical batch 880-92281 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.

Method 8015MOD_NM: The laboratory control sample (LCS) for preparation batch 880-92042 and analytical batch 880-92281 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10 and Diesel Range Organics (Over C10-C28). These analytes were biased high in the LCS and are within parameters for the LCSD; therefore, the data have been reported based on the LCSD.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-92043 and analytical batch 880-92506 was outside the upper control limits.

Method 8015MOD_NM: An incorrect volume of surrogate spiking solution was inadvertently added the following samples: (LCS 880-92043/2-A). Percent recoveries are based on the amount spiked.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-92043 and analytical batch 880-92506 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
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: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-1 (0-6")

Lab Sample ID: 880-49110-1
Matrix: Solid
Date Collected: 09/25/24 13:55
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 13:44	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 13:44	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 13:44	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 13:44	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 13:44	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 13:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/30/24 10:08*	*10/01/24 13:44*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*09/30/24 10:08*	*10/01/24 13:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/24 13:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/02/24 02:11	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	<49.9	U *+	49.9		mg/Kg		09/29/24 20:34	10/02/24 02:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+	49.9		mg/Kg		09/29/24 20:34	10/02/24 02:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/29/24 20:34	10/02/24 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*73*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:11*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1280**		24.8		mg/Kg			10/02/24 06:22	5

Client Sample ID: S-1 (1')

Lab Sample ID: 880-49110-2
Matrix: Solid
Date Collected: 09/25/24 14:00
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 14:04	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 14:04	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 14:04	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 14:04	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 14:04	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:04*	*1*

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-1 (1')

Date Collected: 09/25/24 14:00
Date Received: 09/27/24 13:45
Sample Depth: 1'

Lab Sample ID: 880-49110-2
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/24 14:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/01/24 22:27	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	<49.9	U *+ F1	49.9		mg/Kg		09/29/24 20:34	10/01/24 22:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U *+ F1	49.9		mg/Kg		09/29/24 20:34	10/01/24 22:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/29/24 20:34	10/01/24 22:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*71*		*70 - 130*	*09/29/24 20:34*	*10/01/24 22:27*	*1*
o-Terphenyl	*80*		*70 - 130*	*09/29/24 20:34*	*10/01/24 22:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1130**		25.3		mg/Kg			10/02/24 06:27	5

Client Sample ID: S-1 (3')

Date Collected: 09/25/24 14:05
Date Received: 09/27/24 13:45
Sample Depth: 3'

Lab Sample ID: 880-49110-3
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:24	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:24	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:24	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/24 10:08	10/01/24 14:24	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:24	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/24 10:08	10/01/24 14:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:24*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/24 14:24	1

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			10/02/24 02:25	1

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-1 (3')

Lab Sample ID: 880-49110-3
Matrix: Solid
Date Collected: 09/25/24 14:05
Date Received: 09/27/24 13:45
Sample Depth: 3'

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		09/29/24 20:34	10/02/24 02:25	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		09/29/24 20:34	10/02/24 02:25	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:34	10/02/24 02:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:25*	*1*
o-Terphenyl	*87*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**796**		24.8		mg/Kg			10/02/24 06:44	5

Client Sample ID: S-6 (0-6")

Lab Sample ID: 880-49110-4
Matrix: Solid
Date Collected: 09/25/24 12:45
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 14:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 14:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:45*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/30/24 10:08*	*10/01/24 14:45*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/24 14:45	1

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			10/02/24 02:40	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		09/29/24 20:34	10/02/24 02:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		09/29/24 20:34	10/02/24 02:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:34	10/02/24 02:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*82*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:40*	*1*
o-Terphenyl	*92*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:40*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-6 (0-6")

Lab Sample ID: 880-49110-4
Matrix: Solid
Date Collected: 09/25/24 12:45
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	65.5		4.98		mg/Kg			10/02/24 06:49	1

Client Sample ID: S-6 (1')

Lab Sample ID: 880-49110-5
Matrix: Solid
Date Collected: 09/25/24 12:50
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 15:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 15:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 15:05	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 15:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 15:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 15:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*09/30/24 10:08*	*10/01/24 15:05*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/30/24 10:08*	*10/01/24 15:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/24 15:05	1

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			10/02/24 02:54	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		09/29/24 20:34	10/02/24 02:54	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+	49.7		mg/Kg		09/29/24 20:34	10/02/24 02:54	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/29/24 20:34	10/02/24 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:54*	*1*
o-Terphenyl	*96*		*70 - 130*	*09/29/24 20:34*	*10/02/24 02:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.2		4.97		mg/Kg			10/02/24 06:54	1

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-6 (3')

Lab Sample ID: 880-49110-6
Matrix: Solid
Date Collected: 09/25/24 12:55
Date Received: 09/27/24 13:45
Sample Depth: 3'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 16:42	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 16:42	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 16:42	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 16:42	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 16:42	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*09/30/24 10:08*	*10/01/24 16:42*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/30/24 10:08*	*10/01/24 16:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/24 16:42	1

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			10/02/24 03:10	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		09/29/24 20:34	10/02/24 03:10	1
Diesel Range Organics (Over C10-C28)	<49.7	U *+	49.7		mg/Kg		09/29/24 20:34	10/02/24 03:10	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/29/24 20:34	10/02/24 03:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:10*	*1*
o-Terphenyl	*90*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**138**		4.98		mg/Kg			10/02/24 07:00	1

Client Sample ID: S-7 (0-6")

Lab Sample ID: 880-49110-7
Matrix: Solid
Date Collected: 09/25/24 13:10
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 17:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 17:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 17:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 17:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 17:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 17:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:02*	*1*

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-7 (0-6")

Lab Sample ID: 880-49110-7
Matrix: Solid
Date Collected: 09/25/24 13:10
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/24 17:02	1

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			10/02/24 03:24	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		09/29/24 20:34	10/02/24 03:24	1
Diesel Range Organics (Over C10-C28)	<50.0	U *+	50.0		mg/Kg		09/29/24 20:34	10/02/24 03:24	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:34	10/02/24 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*87*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:24*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**422**		5.00		mg/Kg			10/02/24 07:05	1

Client Sample ID: S-7 (1')

Lab Sample ID: 880-49110-8
Matrix: Solid
Date Collected: 09/25/24 13:15
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		09/30/24 10:08	10/01/24 17:23	1
Toluene	<0.00202	U	0.00202		mg/Kg		09/30/24 10:08	10/01/24 17:23	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		09/30/24 10:08	10/01/24 17:23	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		09/30/24 10:08	10/01/24 17:23	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		09/30/24 10:08	10/01/24 17:23	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		09/30/24 10:08	10/01/24 17:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*120*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:23*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:23*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/01/24 17:23	1

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			10/02/24 03:40	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-7 (1')

Lab Sample ID: 880-49110-8
Matrix: Solid
Date Collected: 09/25/24 13:15
Date Received: 09/27/24 13:45
Sample Depth: 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		09/29/24 20:34	10/02/24 03:40	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		09/29/24 20:34	10/02/24 03:40	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:34	10/02/24 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*78*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:40*	*1*
o-Terphenyl	*88*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**648**		5.00		mg/Kg			10/02/24 07:11	1

Client Sample ID: S-7 (2.5')

Lab Sample ID: 880-49110-9
Matrix: Solid
Date Collected: 09/25/24 13:20
Date Received: 09/27/24 13:45
Sample Depth: 2.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 17:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 17:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 17:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 17:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 17:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 17:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:43*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 17:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/24 17:43	1

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			10/02/24 03:55	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		09/29/24 20:34	10/02/24 03:55	1
Diesel Range Organics (Over C10-C28)	<49.8	U *+	49.8		mg/Kg		09/29/24 20:34	10/02/24 03:55	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:34	10/02/24 03:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*80*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:55*	*1*
o-Terphenyl	*91*		*70 - 130*	*09/29/24 20:34*	*10/02/24 03:55*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-7 (2.5')

Lab Sample ID: 880-49110-9
Matrix: Solid
Date Collected: 09/25/24 13:20
Date Received: 09/27/24 13:45
Sample Depth: 2.5'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1010**		5.00		mg/Kg			10/02/24 07:27	1

Client Sample ID: S-8 (0-6")

Lab Sample ID: 880-49110-10
Matrix: Solid
Date Collected: 09/25/24 13:30
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 18:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 18:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 18:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 18:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 18:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 18:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:04*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:04*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			10/01/24 18:04	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**420**		50.0		mg/Kg			10/03/24 17:28	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		09/29/24 20:37	10/03/24 17:28	1
Diesel Range Organics (Over C10-C28)	**420**	**F1**	50.0		mg/Kg		09/29/24 20:37	10/03/24 17:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:37	10/03/24 17:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*09/29/24 20:37*	*10/03/24 17:28*	*1*
o-Terphenyl	*95*		*70 - 130*	*09/29/24 20:37*	*10/03/24 17:28*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1250**		25.3		mg/Kg			10/02/24 07:32	5

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-8 (1')

Lab Sample ID: 880-49110-11
Matrix: Solid
Date Collected: 09/25/24 13:35
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 18:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 18:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 18:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 18:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 10:08	10/01/24 18:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 10:08	10/01/24 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/01/24 18:24	1

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			10/03/24 18:17	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		09/29/24 20:37	10/03/24 18:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/29/24 20:37	10/03/24 18:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:37	10/03/24 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:17*	*1*
o-Terphenyl	*86*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:17*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**906**		25.2		mg/Kg			10/02/24 07:48	5

Client Sample ID: S-8 (2.5')

Lab Sample ID: 880-49110-12
Matrix: Solid
Date Collected: 09/25/24 13:40
Date Received: 09/27/24 13:45
Sample Depth: 2.5'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 18:44	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 18:44	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 18:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 18:44	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 18:44	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 18:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:44*	*1*

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-8 (2.5')

Lab Sample ID: 880-49110-12
Matrix: Solid
Date Collected: 09/25/24 13:40
Date Received: 09/27/24 13:45
Sample Depth: 2.5'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 18:44*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/24 18:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**155**		49.9		mg/Kg			10/03/24 18:34	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	<49.9	U	49.9		mg/Kg		09/29/24 20:37	10/03/24 18:34	1
Diesel Range Organics (Over C10-C28)	**155**		49.9		mg/Kg		09/29/24 20:37	10/03/24 18:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/29/24 20:37	10/03/24 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:34*	*1*
o-Terphenyl	*91*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**877**		25.3		mg/Kg			10/02/24 07:54	5

Client Sample ID: S-9 (0-6")

Lab Sample ID: 880-49110-13
Matrix: Solid
Date Collected: 09/25/24 12:25
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:05	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/24 10:08	10/01/24 19:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:05	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/24 10:08	10/01/24 19:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:05*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/24 19:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**393**		49.8		mg/Kg			10/03/24 18:51	1

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-9 (0-6")

Lab Sample ID: 880-49110-13
Matrix: Solid
Date Collected: 09/25/24 12:25
Date Received: 09/27/24 13:45
Sample Depth: 0-6"

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		09/29/24 20:37	10/03/24 18:51	1
Diesel Range Organics (Over C10-C28)	**393**		49.8		mg/Kg		09/29/24 20:37	10/03/24 18:51	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:37	10/03/24 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:51*	*1*
o-Terphenyl	*98*		*70 - 130*	*09/29/24 20:37*	*10/03/24 18:51*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**181**		5.01		mg/Kg			10/02/24 08:12	1

Client Sample ID: S-9 (1')

Lab Sample ID: 880-49110-14
Matrix: Solid
Date Collected: 09/25/24 12:30
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:25	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:25	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:25	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		09/30/24 10:08	10/01/24 19:25	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 19:25	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		09/30/24 10:08	10/01/24 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:25*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			10/01/24 19:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**60.4**		50.0		mg/Kg			10/03/24 19:08	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		09/29/24 20:37	10/03/24 19:08	1
Diesel Range Organics (Over C10-C28)	**60.4**		50.0		mg/Kg		09/29/24 20:37	10/03/24 19:08	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:37	10/03/24 19:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*09/29/24 20:37*	*10/03/24 19:08*	*1*
o-Terphenyl	*81*		*70 - 130*	*09/29/24 20:37*	*10/03/24 19:08*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-9 (1')

Lab Sample ID: 880-49110-14
Matrix: Solid
Date Collected: 09/25/24 12:30
Date Received: 09/27/24 13:45
Sample Depth: 1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	303		4.95		mg/Kg			10/02/24 08:00	1

Client Sample ID: S-9 (3')

Lab Sample ID: 880-49110-15
Matrix: Solid
Date Collected: 09/25/24 12:35
Date Received: 09/27/24 13:45
Sample Depth: 3'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 19:46	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 19:46	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 19:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 19:46	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/24 10:08	10/01/24 19:46	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/24 10:08	10/01/24 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:46*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*09/30/24 10:08*	*10/01/24 19:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/01/24 19:46	1

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			10/03/24 19:25	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	<49.6	U	49.6		mg/Kg		09/29/24 20:37	10/03/24 19:25	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		09/29/24 20:37	10/03/24 19:25	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		09/29/24 20:37	10/03/24 19:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*09/29/24 20:37*	*10/03/24 19:25*	*1*
o-Terphenyl	*94*		*70 - 130*	*09/29/24 20:37*	*10/03/24 19:25*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	273		4.96		mg/Kg			10/02/24 09:03	1

Surrogate Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-49110-1	S-1 (0-6")	116	99
880-49110-2	S-1 (1')	117	97
880-49110-3	S-1 (3')	117	98
880-49110-4	S-6 (0-6")	115	96
880-49110-5	S-6 (1')	116	96
880-49110-6	S-6 (3')	120	98
880-49110-7	S-7 (0-6")	115	97
880-49110-8	S-7 (1')	120	98
880-49110-9	S-7 (2.5')	118	97
880-49110-10	S-8 (0-6")	117	96
880-49110-11	S-8 (1')	119	97
880-49110-12	S-8 (2.5')	119	97
880-49110-13	S-9 (0-6")	119	97
880-49110-14	S-9 (1')	117	97
880-49110-15	S-9 (3')	117	97
LCS 880-92095/1-A	Lab Control Sample	113	96
LCSD 880-92095/2-A	Lab Control Sample Dup	111	96
MB 880-92095/5-A	Method Blank	110	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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)
880-49110-1	S-1 (0-6")	73	80
880-49110-2	S-1 (1')	71	80
880-49110-2 MS	S-1 (1')	86	82
880-49110-2 MSD	S-1 (1')	85	82
880-49110-3	S-1 (3')	78	87
880-49110-4	S-6 (0-6")	82	92
880-49110-5	S-6 (1')	88	96
880-49110-6	S-6 (3')	83	90
880-49110-7	S-7 (0-6")	87	98
880-49110-8	S-7 (1')	78	88
880-49110-9	S-7 (2.5')	80	91
880-49110-10	S-8 (0-6")	106	95
880-49110-10 MS	S-8 (0-6")	110	82
880-49110-10 MSD	S-8 (0-6")	87	81
880-49110-11	S-8 (1')	105	86
880-49110-12	S-8 (2.5')	102	91
880-49110-13	S-9 (0-6")	113	98
880-49110-14	S-9 (1')	95	81
880-49110-15	S-9 (3')	113	94
LCS 880-92042/2-A	Lab Control Sample	149 S1+	144 S1+
LCS 880-92043/2-A	Lab Control Sample	155 S1+	144 S1+

Surrogate Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)									
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)								
LCSD 880-92042/3-A	Lab Control Sample Dup	136 S1+	131 S1+								
LCSD 880-92043/3-A	Lab Control Sample Dup	129	117								
MB 880-92042/1-A	Method Blank	70	75								
MB 880-92043/1-A	Method Blank	122	154 S1+								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-92095/5-A
Matrix: Solid
Analysis Batch: 92215

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92095

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 11:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 11:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 11:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 11:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 10:08	10/01/24 11:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/24 10:08	10/01/24 11:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*09/30/24 10:08*	*10/01/24 11:40*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*09/30/24 10:08*	*10/01/24 11:40*	*1*

Lab Sample ID: LCS 880-92095/1-A
Matrix: Solid
Analysis Batch: 92215

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92095

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09670		mg/Kg		97	70 - 130
Toluene	0.100	0.09810		mg/Kg		98	70 - 130
Ethylbenzene	0.100	0.1000		mg/Kg		100	70 - 130
m-Xylene & p-Xylene	0.200	0.2069		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1028		mg/Kg		103	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

Lab Sample ID: LCSD 880-92095/2-A
Matrix: Solid
Analysis Batch: 92215

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 92095

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08899		mg/Kg		89	70 - 130	8	35
Toluene	0.100	0.09017		mg/Kg		90	70 - 130	8	35
Ethylbenzene	0.100	0.09178		mg/Kg		92	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1902		mg/Kg		95	70 - 130	8	35
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130	8	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*

QC Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-92042/1-A
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92042

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		09/29/24 20:34	10/01/24 21:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/29/24 20:34	10/01/24 21:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:34	10/01/24 21:43	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*70*		*70 - 130*	*09/29/24 20:34*	*10/01/24 21:43*	*1*
o-Terphenyl	*75*		*70 - 130*	*09/29/24 20:34*	*10/01/24 21:43*	*1*

Lab Sample ID: LCS 880-92042/2-A
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92042

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1328	*+	mg/Kg		133	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1423	*+	mg/Kg		142	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*149*	*S1+*	*70 - 130*
o-Terphenyl	*144*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-92042/3-A
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 92042

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1151		mg/Kg		115	70 - 130	14	20
Diesel Range Organics (Over C10-C28)			1000	1267		mg/Kg		127	70 - 130	12	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*136*	*S1+*	*70 - 130*
o-Terphenyl	*131*	*S1+*	*70 - 130*

Lab Sample ID: 880-49110-2 MS
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 92042

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+ F1	994	671.4	F1	mg/Kg		68	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U *+ F1	994	621.3	F1	mg/Kg		61	70 - 130		

QC Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-49110-2 MS
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 92042

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	86		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: 880-49110-2 MSD
Matrix: Solid
Analysis Batch: 92281

Client Sample ID: S-1 (1')
Prep Type: Total/NA
Prep Batch: 92042

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	<49.9	U *+ F1	994	661.2	F1	mg/Kg		67	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+ F1	994	605.8	F1	mg/Kg		59	70 - 130	3	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	85		70 - 130
o-Terphenyl	82		70 - 130

Lab Sample ID: MB 880-92043/1-A
Matrix: Solid
Analysis Batch: 92506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 92043

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		09/29/24 20:36	10/03/24 03:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/29/24 20:36	10/03/24 03:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:36	10/03/24 03:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	09/29/24 20:36	10/03/24 03:55	1
o-Terphenyl	154	S1+	70 - 130	09/29/24 20:36	10/03/24 03:55	1

Lab Sample ID: LCS 880-92043/2-A
Matrix: Solid
Analysis Batch: 92506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 92043

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1271		mg/Kg		127	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1187		mg/Kg		119	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	155	S1+	70 - 130
o-Terphenyl	144	S1+	70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-92043/3-A
Matrix: Solid
Analysis Batch: 92506

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 92043

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1127		mg/Kg		113	70 - 130	12	20
Diesel Range Organics (Over C10-C28)			1000	1003		mg/Kg		100	70 - 130	17	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*129*		*70 - 130*
o-Terphenyl	*117*		*70 - 130*

Lab Sample ID: 880-49110-10 MS
Matrix: Solid
Analysis Batch: 92506

Client Sample ID: S-8 (0-6")
Prep Type: Total/NA
Prep Batch: 92043

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	997	951.6		mg/Kg		95	70 - 130
Diesel Range Organics (Over C10-C28)	420	F1	997	976.3	F1	mg/Kg		56	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*82*		*70 - 130*

Lab Sample ID: 880-49110-10 MSD
Matrix: Solid
Analysis Batch: 92506

Client Sample ID: S-8 (0-6")
Prep Type: Total/NA
Prep Batch: 92043

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	997	924.0		mg/Kg		93	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	420	F1	997	1091	F1	mg/Kg		67	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*87*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-92154/1-A
Matrix: Solid
Analysis Batch: 92241

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			10/02/24 05:39	1

QC Sample Results

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-92154/2-A
Matrix: Solid
Analysis Batch: 92241

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	249.1		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-92154/3-A
Matrix: Solid
Analysis Batch: 92241

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	250.0		mg/Kg		100	90 - 110	0	20

Lab Sample ID: 880-49110-8 MS
Matrix: Solid
Analysis Batch: 92241

Client Sample ID: S-7 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	648		250	882.6		mg/Kg		94	90 - 110		

Lab Sample ID: 880-49110-8 MSD
Matrix: Solid
Analysis Batch: 92241

Client Sample ID: S-7 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	648		250	884.8		mg/Kg		95	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

GC VOA

Prep Batch: 92095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	5035	
880-49110-2	S-1 (1')	Total/NA	Solid	5035	
880-49110-3	S-1 (3')	Total/NA	Solid	5035	
880-49110-4	S-6 (0-6")	Total/NA	Solid	5035	
880-49110-5	S-6 (1')	Total/NA	Solid	5035	
880-49110-6	S-6 (3')	Total/NA	Solid	5035	
880-49110-7	S-7 (0-6")	Total/NA	Solid	5035	
880-49110-8	S-7 (1')	Total/NA	Solid	5035	
880-49110-9	S-7 (2.5')	Total/NA	Solid	5035	
880-49110-10	S-8 (0-6")	Total/NA	Solid	5035	
880-49110-11	S-8 (1')	Total/NA	Solid	5035	
880-49110-12	S-8 (2.5')	Total/NA	Solid	5035	
880-49110-13	S-9 (0-6")	Total/NA	Solid	5035	
880-49110-14	S-9 (1')	Total/NA	Solid	5035	
880-49110-15	S-9 (3')	Total/NA	Solid	5035	
MB 880-92095/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-92095/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-92095/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 92215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	8021B	92095
880-49110-2	S-1 (1')	Total/NA	Solid	8021B	92095
880-49110-3	S-1 (3')	Total/NA	Solid	8021B	92095
880-49110-4	S-6 (0-6")	Total/NA	Solid	8021B	92095
880-49110-5	S-6 (1')	Total/NA	Solid	8021B	92095
880-49110-6	S-6 (3')	Total/NA	Solid	8021B	92095
880-49110-7	S-7 (0-6")	Total/NA	Solid	8021B	92095
880-49110-8	S-7 (1')	Total/NA	Solid	8021B	92095
880-49110-9	S-7 (2.5')	Total/NA	Solid	8021B	92095
880-49110-10	S-8 (0-6")	Total/NA	Solid	8021B	92095
880-49110-11	S-8 (1')	Total/NA	Solid	8021B	92095
880-49110-12	S-8 (2.5')	Total/NA	Solid	8021B	92095
880-49110-13	S-9 (0-6")	Total/NA	Solid	8021B	92095
880-49110-14	S-9 (1')	Total/NA	Solid	8021B	92095
880-49110-15	S-9 (3')	Total/NA	Solid	8021B	92095
MB 880-92095/5-A	Method Blank	Total/NA	Solid	8021B	92095
LCS 880-92095/1-A	Lab Control Sample	Total/NA	Solid	8021B	92095
LCSD 880-92095/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	92095

Analysis Batch: 92301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	Total BTEX	
880-49110-2	S-1 (1')	Total/NA	Solid	Total BTEX	
880-49110-3	S-1 (3')	Total/NA	Solid	Total BTEX	
880-49110-4	S-6 (0-6")	Total/NA	Solid	Total BTEX	
880-49110-5	S-6 (1')	Total/NA	Solid	Total BTEX	
880-49110-6	S-6 (3')	Total/NA	Solid	Total BTEX	
880-49110-7	S-7 (0-6")	Total/NA	Solid	Total BTEX	
880-49110-8	S-7 (1')	Total/NA	Solid	Total BTEX	
880-49110-9	S-7 (2.5')	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

GC VOA (Continued)

Analysis Batch: 92301 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-10	S-8 (0-6")	Total/NA	Solid	Total BTEX	
880-49110-11	S-8 (1')	Total/NA	Solid	Total BTEX	
880-49110-12	S-8 (2.5')	Total/NA	Solid	Total BTEX	
880-49110-13	S-9 (0-6")	Total/NA	Solid	Total BTEX	
880-49110-14	S-9 (1')	Total/NA	Solid	Total BTEX	
880-49110-15	S-9 (3')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 92042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-2	S-1 (1')	Total/NA	Solid	8015NM Prep	
880-49110-3	S-1 (3')	Total/NA	Solid	8015NM Prep	
880-49110-4	S-6 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-5	S-6 (1')	Total/NA	Solid	8015NM Prep	
880-49110-6	S-6 (3')	Total/NA	Solid	8015NM Prep	
880-49110-7	S-7 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-8	S-7 (1')	Total/NA	Solid	8015NM Prep	
880-49110-9	S-7 (2.5')	Total/NA	Solid	8015NM Prep	
MB 880-92042/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-92042/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-92042/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-49110-2 MS	S-1 (1')	Total/NA	Solid	8015NM Prep	
880-49110-2 MSD	S-1 (1')	Total/NA	Solid	8015NM Prep	

Prep Batch: 92043

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-10	S-8 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-11	S-8 (1')	Total/NA	Solid	8015NM Prep	
880-49110-12	S-8 (2.5')	Total/NA	Solid	8015NM Prep	
880-49110-13	S-9 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-14	S-9 (1')	Total/NA	Solid	8015NM Prep	
880-49110-15	S-9 (3')	Total/NA	Solid	8015NM Prep	
MB 880-92043/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-92043/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-92043/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-49110-10 MS	S-8 (0-6")	Total/NA	Solid	8015NM Prep	
880-49110-10 MSD	S-8 (0-6")	Total/NA	Solid	8015NM Prep	

Analysis Batch: 92281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	8015B NM	92042
880-49110-2	S-1 (1')	Total/NA	Solid	8015B NM	92042
880-49110-3	S-1 (3')	Total/NA	Solid	8015B NM	92042
880-49110-4	S-6 (0-6")	Total/NA	Solid	8015B NM	92042
880-49110-5	S-6 (1')	Total/NA	Solid	8015B NM	92042
880-49110-6	S-6 (3')	Total/NA	Solid	8015B NM	92042
880-49110-7	S-7 (0-6")	Total/NA	Solid	8015B NM	92042
880-49110-8	S-7 (1')	Total/NA	Solid	8015B NM	92042
880-49110-9	S-7 (2.5')	Total/NA	Solid	8015B NM	92042

QC Association Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

GC Semi VOA (Continued)

Analysis Batch: 92281 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-92042/1-A	Method Blank	Total/NA	Solid	8015B NM	92042
LCS 880-92042/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	92042
LCSD 880-92042/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	92042
880-49110-2 MS	S-1 (1')	Total/NA	Solid	8015B NM	92042
880-49110-2 MSD	S-1 (1')	Total/NA	Solid	8015B NM	92042

Analysis Batch: 92415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Total/NA	Solid	8015 NM	
880-49110-2	S-1 (1')	Total/NA	Solid	8015 NM	
880-49110-3	S-1 (3')	Total/NA	Solid	8015 NM	
880-49110-4	S-6 (0-6")	Total/NA	Solid	8015 NM	
880-49110-5	S-6 (1')	Total/NA	Solid	8015 NM	
880-49110-6	S-6 (3')	Total/NA	Solid	8015 NM	
880-49110-7	S-7 (0-6")	Total/NA	Solid	8015 NM	
880-49110-8	S-7 (1')	Total/NA	Solid	8015 NM	
880-49110-9	S-7 (2.5')	Total/NA	Solid	8015 NM	
880-49110-10	S-8 (0-6")	Total/NA	Solid	8015 NM	
880-49110-11	S-8 (1')	Total/NA	Solid	8015 NM	
880-49110-12	S-8 (2.5')	Total/NA	Solid	8015 NM	
880-49110-13	S-9 (0-6")	Total/NA	Solid	8015 NM	
880-49110-14	S-9 (1')	Total/NA	Solid	8015 NM	
880-49110-15	S-9 (3')	Total/NA	Solid	8015 NM	

Analysis Batch: 92506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-10	S-8 (0-6")	Total/NA	Solid	8015B NM	92043
880-49110-11	S-8 (1')	Total/NA	Solid	8015B NM	92043
880-49110-12	S-8 (2.5')	Total/NA	Solid	8015B NM	92043
880-49110-13	S-9 (0-6")	Total/NA	Solid	8015B NM	92043
880-49110-14	S-9 (1')	Total/NA	Solid	8015B NM	92043
880-49110-15	S-9 (3')	Total/NA	Solid	8015B NM	92043
MB 880-92043/1-A	Method Blank	Total/NA	Solid	8015B NM	92043
LCS 880-92043/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	92043
LCSD 880-92043/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	92043
880-49110-10 MS	S-8 (0-6")	Total/NA	Solid	8015B NM	92043
880-49110-10 MSD	S-8 (0-6")	Total/NA	Solid	8015B NM	92043

HPLC/IC

Leach Batch: 92154

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Soluble	Solid	DI Leach	
880-49110-2	S-1 (1')	Soluble	Solid	DI Leach	
880-49110-3	S-1 (3')	Soluble	Solid	DI Leach	
880-49110-4	S-6 (0-6")	Soluble	Solid	DI Leach	
880-49110-5	S-6 (1')	Soluble	Solid	DI Leach	
880-49110-6	S-6 (3')	Soluble	Solid	DI Leach	
880-49110-7	S-7 (0-6")	Soluble	Solid	DI Leach	
880-49110-8	S-7 (1')	Soluble	Solid	DI Leach	
880-49110-9	S-7 (2.5')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Leach Batch: 92154 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-10	S-8 (0-6")	Soluble	Solid	DI Leach	
880-49110-11	S-8 (1')	Soluble	Solid	DI Leach	
880-49110-12	S-8 (2.5')	Soluble	Solid	DI Leach	
880-49110-13	S-9 (0-6")	Soluble	Solid	DI Leach	
880-49110-14	S-9 (1')	Soluble	Solid	DI Leach	
880-49110-15	S-9 (3')	Soluble	Solid	DI Leach	
MB 880-92154/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-92154/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-92154/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-49110-8 MS	S-7 (1')	Soluble	Solid	DI Leach	
880-49110-8 MSD	S-7 (1')	Soluble	Solid	DI Leach	

Analysis Batch: 92241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49110-1	S-1 (0-6")	Soluble	Solid	300.0	92154
880-49110-2	S-1 (1')	Soluble	Solid	300.0	92154
880-49110-3	S-1 (3')	Soluble	Solid	300.0	92154
880-49110-4	S-6 (0-6")	Soluble	Solid	300.0	92154
880-49110-5	S-6 (1')	Soluble	Solid	300.0	92154
880-49110-6	S-6 (3')	Soluble	Solid	300.0	92154
880-49110-7	S-7 (0-6")	Soluble	Solid	300.0	92154
880-49110-8	S-7 (1')	Soluble	Solid	300.0	92154
880-49110-9	S-7 (2.5')	Soluble	Solid	300.0	92154
880-49110-10	S-8 (0-6")	Soluble	Solid	300.0	92154
880-49110-11	S-8 (1')	Soluble	Solid	300.0	92154
880-49110-12	S-8 (2.5')	Soluble	Solid	300.0	92154
880-49110-13	S-9 (0-6")	Soluble	Solid	300.0	92154
880-49110-14	S-9 (1')	Soluble	Solid	300.0	92154
880-49110-15	S-9 (3')	Soluble	Solid	300.0	92154
MB 880-92154/1-A	Method Blank	Soluble	Solid	300.0	92154
LCS 880-92154/2-A	Lab Control Sample	Soluble	Solid	300.0	92154
LCSD 880-92154/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	92154
880-49110-8 MS	S-7 (1')	Soluble	Solid	300.0	92154
880-49110-8 MSD	S-7 (1')	Soluble	Solid	300.0	92154

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-1 (0-6")

Lab Sample ID: 880-49110-1
Matrix: Solid
Date Collected: 09/25/24 13:55
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 13:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 13:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 02:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 02:11	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 06:22	CH	EET MID

Client Sample ID: S-1 (1')

Lab Sample ID: 880-49110-2
Matrix: Solid
Date Collected: 09/25/24 14:00
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 14:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/01/24 22:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/01/24 22:27	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 06:27	CH	EET MID

Client Sample ID: S-1 (3')

Lab Sample ID: 880-49110-3
Matrix: Solid
Date Collected: 09/25/24 14:05
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 14:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 14:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 02:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 02:25	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 06:44	CH	EET MID

Client Sample ID: S-6 (0-6")

Lab Sample ID: 880-49110-4
Matrix: Solid
Date Collected: 09/25/24 12:45
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 14:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 14:45	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-6 (0-6")

Lab Sample ID: 880-49110-4
Matrix: Solid
Date Collected: 09/25/24 12:45
Date Received: 09/27/24 13:45

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			92415	10/02/24 02:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 02:40	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 06:49	CH	EET MID

Client Sample ID: S-6 (1')

Lab Sample ID: 880-49110-5
Matrix: Solid
Date Collected: 09/25/24 12:50
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 15:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 15:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 02:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 02:54	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 06:54	CH	EET MID

Client Sample ID: S-6 (3')

Lab Sample ID: 880-49110-6
Matrix: Solid
Date Collected: 09/25/24 12:55
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 16:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 16:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 03:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 03:10	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 07:00	CH	EET MID

Client Sample ID: S-7 (0-6")

Lab Sample ID: 880-49110-7
Matrix: Solid
Date Collected: 09/25/24 13:10
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 17:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 17:02	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 03:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 03:24	TKC	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-7 (0-6")

Lab Sample ID: 880-49110-7
Matrix: Solid
Date Collected: 09/25/24 13:10
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.00 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 07:05	CH	EET MID

Client Sample ID: S-7 (1')

Lab Sample ID: 880-49110-8
Matrix: Solid
Date Collected: 09/25/24 13:15
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 17:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 17:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 03:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 03:40	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 07:11	CH	EET MID

Client Sample ID: S-7 (2.5')

Lab Sample ID: 880-49110-9
Matrix: Solid
Date Collected: 09/25/24 13:20
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 17:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 17:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/02/24 03:55	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	92042	09/29/24 20:34	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92281	10/02/24 03:55	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 07:27	CH	EET MID

Client Sample ID: S-8 (0-6")

Lab Sample ID: 880-49110-10
Matrix: Solid
Date Collected: 09/25/24 13:30
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 18:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 18:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/03/24 17:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 17:28	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 07:32	CH	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-8 (1')

Lab Sample ID: 880-49110-11
Matrix: Solid
Date Collected: 09/25/24 13:35
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 18:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 18:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/03/24 18:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 18:17	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 07:48	CH	EET MID

Client Sample ID: S-8 (2.5')

Lab Sample ID: 880-49110-12
Matrix: Solid
Date Collected: 09/25/24 13:40
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 18:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 18:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/03/24 18:34	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 18:34	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	92241	10/02/24 07:54	CH	EET MID

Client Sample ID: S-9 (0-6")

Lab Sample ID: 880-49110-13
Matrix: Solid
Date Collected: 09/25/24 12:25
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 19:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 19:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/03/24 18:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 18:51	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 08:12	CH	EET MID

Client Sample ID: S-9 (1')

Lab Sample ID: 880-49110-14
Matrix: Solid
Date Collected: 09/25/24 12:30
Date Received: 09/27/24 13:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 19:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 19:25	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Client Sample ID: S-9 (1')

Date Collected: 09/25/24 12:30
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49110-14

Matrix: Solid

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			92415	10/03/24 19:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 19:08	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 08:00	CH	EET MID

Client Sample ID: S-9 (3')

Date Collected: 09/25/24 12:35
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49110-15

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	5035			5.02 g	5 mL	92095	09/30/24 10:08	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92215	10/01/24 19:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92301	10/01/24 19:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			92415	10/03/24 19:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10.00 mL	92043	09/29/24 20:37	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92506	10/03/24 19:25	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	92154	09/30/24 13:18	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	92241	10/02/24 09:03	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: ARU #13

Job ID: 880-49110-1
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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
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
5035	Closed System Purge and Trap	SW846	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.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Crain Environmental
Project/Site: ARU #13

Job ID: 880-49110-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-49110-1	S-1 (0-6")	Solid	09/25/24 13:55	09/27/24 13:45	0-6"
880-49110-2	S-1 (1')	Solid	09/25/24 14:00	09/27/24 13:45	1'
880-49110-3	S-1 (3')	Solid	09/25/24 14:05	09/27/24 13:45	3'
880-49110-4	S-6 (0-6")	Solid	09/25/24 12:45	09/27/24 13:45	0-6"
880-49110-5	S-6 (1')	Solid	09/25/24 12:50	09/27/24 13:45	1'
880-49110-6	S-6 (3')	Solid	09/25/24 12:55	09/27/24 13:45	3'
880-49110-7	S-7 (0-6")	Solid	09/25/24 13:10	09/27/24 13:45	0-6"
880-49110-8	S-7 (1')	Solid	09/25/24 13:15	09/27/24 13:45	1'
880-49110-9	S-7 (2.5')	Solid	09/25/24 13:20	09/27/24 13:45	2.5'
880-49110-10	S-8 (0-6")	Solid	09/25/24 13:30	09/27/24 13:45	0-6"
880-49110-11	S-8 (1')	Solid	09/25/24 13:35	09/27/24 13:45	1'
880-49110-12	S-8 (2.5')	Solid	09/25/24 13:40	09/27/24 13:45	2.5'
880-49110-13	S-9 (0-6")	Solid	09/25/24 12:25	09/27/24 13:45	0-6"
880-49110-14	S-9 (1')	Solid	09/25/24 12:30	09/27/24 13:45	1'
880-49110-15	S-9 (3')	Solid	09/25/24 12:35	09/27/24 13:45	3'

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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

880-49110 Chain of Custody

www.xenco.com Page 1

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane
Address:	2925 E. 17th St.	Address:	310 W. Wall, Ste. 300
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79701
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:	ARU #13	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:	-1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	3.2
Total Containers:		Corrected Temperature:	3.2

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	Pres. Code	Parameters: TPH 8015M	BTEX	Chlorides	Sample Comments
S-1 (0-6")	S	9/25/24	1355	0-6"	C	1		X	X	X	
S-1 (1')			1400	1'							
S-1 (3')			1405	3'							
S-6 (0-6")			1245	0-6"							
S-6 (1')			1250	1'							
S-6 (3')			1255	3'							
S-7 (0-6")			1310	0-6"							
S-7 (1')			1315	1'							
S-7 (2.5')			1320	2.5'							
S-8 (0-6")			1330	0-6"							

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		9/27/24 1345	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: 49110

www.xenco.com Page 2 of 2

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane
Address:	2925 E. 17th St.	Address:	310 W. Wall, Ste. 300
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79701
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:	ARU #13	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:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015M	BTEX	Chlorides	Sample Comments
S-8 (1')	S	9/25/24	1335	1'	C	1		X	X	X	
S-8 (2.5')			1340	2.5'							
S-9 (0-6")			1225	0-6"							
S-9 (1')			1230	1'							
S-9 (3')	↓	↓	1235	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

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		9/27/24 BUS	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-49110-1
SDG Number: Lea Co., NM

Login Number: 49110
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	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 1/21/2025 12:39:30 PM

JOB DESCRIPTION

ARU 13
Lea Co. NM

JOB NUMBER

880-53354-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

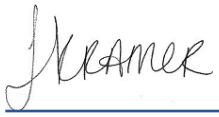
Eurofins Midland

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



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1/21/2025 12:39:30 PM

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

Client: Crain Environmental
Project/Site: ARU 13

Laboratory Job ID: 880-53354-1
SDG: Lea Co. NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: ARU 13

Job ID: 880-53354-1

Job ID: 880-53354-1 Eurofins Midland

Job Narrative
880-53354-1

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 1/17/2025 8:27 AM. 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 4.8°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: S-10 (0-1') (880-53354-1), S-11 (0-1') (880-53354-2), S-12 (0-1') (880-53354-3), S-13 (0-1') (880-53354-4), S-14 (0-4') (880-53354-5), S-15 (0-4') (880-53354-6), S-16 (0-4') (880-53354-7), S-17 (0-4') (880-53354-8), S-18 (0-4') (880-53354-9), S-19 (0-4') (880-53354-10), S-20 (0-4') (880-53354-11), S-21 (0-4') (880-53354-12), S-22 (4.1') (880-53354-13), S-23 (4.1') (880-53354-14), S-24 (4.1') (880-53354-15) and S-25 (4.1') (880-53354-16).

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

Diesel Range Organics
Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-100652 recovered above the upper control limit for Diesel Range Organics (Over C10-C28). An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-100652/21).

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

HPLC/IC
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: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-10 (0-1')

Lab Sample ID: 880-53354-1
Matrix: Solid
Date Collected: 01/15/25 14:40
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 15:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 15:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 15:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		01/17/25 10:45	01/17/25 15:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 15:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		01/17/25 10:45	01/17/25 15:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*01/17/25 10:45*	*01/17/25 15:49*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/17/25 10:45*	*01/17/25 15:49*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			01/17/25 15:49	1

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			01/20/25 13:10	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		01/17/25 09:29	01/20/25 13:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 13:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 13:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:10*	*1*
o-Terphenyl	*122*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:10*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/20/25 13:59	1

Client Sample ID: S-11 (0-1')

Lab Sample ID: 880-53354-2
Matrix: Solid
Date Collected: 01/15/25 14:45
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 16:15	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 16:15	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 16:15	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 16:15	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 16:15	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 16:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 16:15*	*1*

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-11 (0-1')

Lab Sample ID: 880-53354-2
Matrix: Solid
Date Collected: 01/15/25 14:45
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/17/25 10:45*	*01/17/25 16:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/17/25 16:15	1

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			01/20/25 13:27	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	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 13:27	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 13:27	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 13:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:27*	*1*
o-Terphenyl	*119*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:27*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			01/20/25 14:04	1

Client Sample ID: S-12 (0-1')

Lab Sample ID: 880-53354-3
Matrix: Solid
Date Collected: 01/15/25 14:50
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 16:42	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 16:42	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 16:42	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/17/25 10:45	01/17/25 16:42	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 16:42	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/17/25 10:45	01/17/25 16:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*01/17/25 10:45*	*01/17/25 16:42*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/17/25 10:45*	*01/17/25 16:42*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			01/17/25 16:42	1

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			01/20/25 13:42	1

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-12 (0-1')

Lab Sample ID: 880-53354-3
Matrix: Solid
Date Collected: 01/15/25 14:50
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

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		01/17/25 09:29	01/20/25 13:42	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 13:42	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 13:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:42*	*1*
o-Terphenyl	*123*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:42*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			01/20/25 14:10	1

Client Sample ID: S-13 (0-1')

Lab Sample ID: 880-53354-4
Matrix: Solid
Date Collected: 01/15/25 14:55
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 17:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 17:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 17:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/17/25 10:45	01/17/25 17:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 17:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/17/25 10:45	01/17/25 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*01/17/25 10:45*	*01/17/25 17:08*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 17:08*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/17/25 17:08	1

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			01/20/25 13:58	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		01/17/25 09:29	01/20/25 13:58	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 13:58	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 13:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*117*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:58*	*1*
o-Terphenyl	*116*		*70 - 130*	*01/17/25 09:29*	*01/20/25 13:58*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-13 (0-1')

Lab Sample ID: 880-53354-4
Matrix: Solid
Date Collected: 01/15/25 14:55
Date Received: 01/17/25 08:27
Sample Depth: 0-1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/20/25 14:16	1

Client Sample ID: S-14 (0-4')

Lab Sample ID: 880-53354-5
Matrix: Solid
Date Collected: 01/15/25 15:00
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 17:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 17:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 17:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/17/25 10:45	01/17/25 17:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 17:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/17/25 10:45	01/17/25 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*01/17/25 10:45*	*01/17/25 17:34*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/17/25 10:45*	*01/17/25 17:34*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/17/25 17:34	1

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			01/20/25 14:13	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		01/17/25 09:29	01/20/25 14:13	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 14:13	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 14:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:13*	*1*
o-Terphenyl	*112*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:13*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/20/25 14:33	1

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

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

Lab Sample ID: 880-53354-6
Matrix: Solid
Date Collected: 01/15/25 15:05
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 18:01	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 18:01	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 18:01	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 18:01	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 18:01	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*01/17/25 10:45*	*01/17/25 18:01*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 18:01*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/17/25 18:01	1

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			01/20/25 14:29	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		01/17/25 09:29	01/20/25 14:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 14:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 14:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:29*	*1*
o-Terphenyl	*112*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96		mg/Kg			01/20/25 14:39	1

Client Sample ID: S-16 (0-4')

Lab Sample ID: 880-53354-7
Matrix: Solid
Date Collected: 01/15/25 15:10
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 19:46	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 19:46	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 19:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/17/25 10:45	01/17/25 19:46	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 19:46	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/17/25 10:45	01/17/25 19:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*01/17/25 10:45*	*01/17/25 19:46*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-16 (0-4')

Lab Sample ID: 880-53354-7
Matrix: Solid
Date Collected: 01/15/25 15:10
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*01/17/25 10:45*	*01/17/25 19:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/17/25 19:46	1

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			01/20/25 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	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 14:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 14:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*114*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:45*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 14:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			01/20/25 14:44	1

Client Sample ID: S-17 (0-4')

Lab Sample ID: 880-53354-8
Matrix: Solid
Date Collected: 01/15/25 15:15
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 20:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 20:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 20:13	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 20:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 20:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 20:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 20:13*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/17/25 10:45*	*01/17/25 20:13*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/17/25 20:13	1

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			01/20/25 15:01	1

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-17 (0-4')

Lab Sample ID: 880-53354-8
Matrix: Solid
Date Collected: 01/15/25 15:15
Date Received: 01/17/25 08:27
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	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 15:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 15:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 15:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*112*		*70 - 130*	*01/17/25 09:29*	*01/20/25 15:01*	*1*
o-Terphenyl	*110*		*70 - 130*	*01/17/25 09:29*	*01/20/25 15:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**11.2**		9.94		mg/Kg			01/20/25 14:50	1

Client Sample ID: S-18 (0-4')

Lab Sample ID: 880-53354-9
Matrix: Solid
Date Collected: 01/15/25 15:20
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 20:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 20:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 20:39	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/17/25 10:45	01/17/25 20:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 20:39	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/17/25 10:45	01/17/25 20:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 20:39*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*01/17/25 10:45*	*01/17/25 20:39*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			01/17/25 20:39	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/20/25 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	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 16:59	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 16:59	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 16:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*01/17/25 09:29*	*01/20/25 16:59*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 16:59*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-18 (0-4')

Lab Sample ID: 880-53354-9
Matrix: Solid
Date Collected: 01/15/25 15:20
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/20/25 14:56	1

Client Sample ID: S-19 (0-4')

Lab Sample ID: 880-53354-10
Matrix: Solid
Date Collected: 01/15/25 15:25
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 21:05	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 21:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 21:05	1
m-Xylene & p-Xylene	<0.00397	U	0.00397		mg/Kg		01/17/25 10:45	01/17/25 21:05	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/17/25 10:45	01/17/25 21:05	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		01/17/25 10:45	01/17/25 21:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:05*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:05*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			01/17/25 21:05	1

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			01/20/25 17:14	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		01/17/25 09:29	01/20/25 17:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 17:14	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 17:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:14*	*1*
o-Terphenyl	*106*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/20/25 15:01	1

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-20 (0-4')

Lab Sample ID: 880-53354-11
Matrix: Solid
Date Collected: 01/15/25 15:30
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 21:32	1
Toluene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 21:32	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 21:32	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		01/17/25 10:45	01/17/25 21:32	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		01/17/25 10:45	01/17/25 21:32	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		01/17/25 10:45	01/17/25 21:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:32*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:32*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			01/17/25 21:32	1

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			01/20/25 17:30	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		01/17/25 09:29	01/20/25 17:30	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 17:30	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 17:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*106*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:30*	*1*
o-Terphenyl	*104*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/20/25 15:18	1

Client Sample ID: S-21 (0-4')

Lab Sample ID: 880-53354-12
Matrix: Solid
Date Collected: 01/15/25 15:35
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 21:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 21:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 21:58	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		01/17/25 10:45	01/17/25 21:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 10:45	01/17/25 21:58	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		01/17/25 10:45	01/17/25 21:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:58*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-21 (0-4')

Date Collected: 01/15/25 15:35
Date Received: 01/17/25 08:27
Sample Depth: 0-4'

Lab Sample ID: 880-53354-12

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC) (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*01/17/25 10:45*	*01/17/25 21:58*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			01/17/25 21:58	1

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			01/20/25 17:45	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	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 17:45	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 17:45	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 17:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*110*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:45*	*1*
o-Terphenyl	*108*		*70 - 130*	*01/17/25 09:29*	*01/20/25 17:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.98	U	9.98		mg/Kg			01/20/25 15:24	1

Client Sample ID: S-22 (4.1')

Date Collected: 01/15/25 15:40
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

Lab Sample ID: 880-53354-13

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:24	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 22:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 22:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*01/17/25 10:45*	*01/17/25 22:24*	*1*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*	*01/17/25 10:45*	*01/17/25 22:24*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/17/25 22:24	1

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			01/20/25 18:01	1

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Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-22 (4.1')

Lab Sample ID: 880-53354-13
Matrix: Solid
Date Collected: 01/15/25 15:40
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

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		01/17/25 09:29	01/20/25 18:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 18:01	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:01*	*1*
o-Terphenyl	*109*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:01*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.94	U	9.94		mg/Kg			01/20/25 15:41	1

Client Sample ID: S-23 (4.1')

Lab Sample ID: 880-53354-14
Matrix: Solid
Date Collected: 01/15/25 15:45
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:51	1
Toluene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:51	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 22:51	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		01/17/25 10:45	01/17/25 22:51	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		01/17/25 10:45	01/17/25 22:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 22:51*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 10:45*	*01/17/25 22:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			01/17/25 22:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			01/20/25 18:16	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	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 18:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 18:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		01/17/25 09:29	01/20/25 18:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*103*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:16*	*1*
o-Terphenyl	*101*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:16*	*1*

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-23 (4.1')

Lab Sample ID: 880-53354-14
Matrix: Solid
Date Collected: 01/15/25 15:45
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			01/20/25 15:47	1

Client Sample ID: S-24 (4.1')

Lab Sample ID: 880-53354-15
Matrix: Solid
Date Collected: 01/15/25 15:50
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		01/17/25 09:23	01/17/25 23:17	1
Toluene	<0.00198	U	0.00198		mg/Kg		01/17/25 09:23	01/17/25 23:17	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		01/17/25 09:23	01/17/25 23:17	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		01/17/25 09:23	01/17/25 23:17	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		01/17/25 09:23	01/17/25 23:17	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		01/17/25 09:23	01/17/25 23:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*01/17/25 09:23*	*01/17/25 23:17*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*01/17/25 09:23*	*01/17/25 23:17*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			01/17/25 23:17	1

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			01/20/25 18:30	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		01/17/25 09:29	01/20/25 18:30	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 18:30	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		01/17/25 09:29	01/20/25 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:30*	*1*
o-Terphenyl	*102*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:30*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg			01/20/25 15:52	1

Client Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-25 (4.1')

Date Collected: 01/15/25 15:55
Date Received: 01/17/25 08:27
Sample Depth: 4.1'

Lab Sample ID: 880-53354-16

Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 23:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 23:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 23:43	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		01/17/25 10:45	01/17/25 23:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		01/17/25 10:45	01/17/25 23:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		01/17/25 10:45	01/17/25 23:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*98*		*70 - 130*	*01/17/25 10:45*	*01/17/25 23:43*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/17/25 10:45*	*01/17/25 23:43*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			01/17/25 23:43	1

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			01/20/25 18:47	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		01/17/25 09:29	01/20/25 18:47	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 18:47	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		01/17/25 09:29	01/20/25 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:47*	*1*
o-Terphenyl	*99*		*70 - 130*	*01/17/25 09:29*	*01/20/25 18:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.2**		10.1		mg/Kg			01/20/25 15:58	1

Surrogate Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-53354-1	S-10 (0-1')	92	98
880-53354-2	S-11 (0-1')	99	97
880-53354-3	S-12 (0-1')	102	100
880-53354-4	S-13 (0-1')	101	99
880-53354-5	S-14 (0-4')	104	101
880-53354-6	S-15 (0-4')	100	99
880-53354-7	S-16 (0-4')	90	92
880-53354-8	S-17 (0-4')	99	102
880-53354-9	S-18 (0-4')	99	97
880-53354-10	S-19 (0-4')	101	101
880-53354-11	S-20 (0-4')	101	100
880-53354-12	S-21 (0-4')	110	104
880-53354-13	S-22 (4.1')	105	102
880-53354-14	S-23 (4.1')	99	99
880-53354-15	S-24 (4.1')	99	98
880-53354-16	S-25 (4.1')	98	89
LCS 880-100498/1-A	Lab Control Sample	93	98
LCSD 880-100498/2-A	Lab Control Sample Dup	87	95
MB 880-100498/5-A	Method Blank	90	89

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-53354-1	S-10 (0-1')	122	122
880-53354-2	S-11 (0-1')	118	119
880-53354-3	S-12 (0-1')	122	123
880-53354-4	S-13 (0-1')	117	116
880-53354-5	S-14 (0-4')	113	112
880-53354-6	S-15 (0-4')	113	112
880-53354-7	S-16 (0-4')	114	111
880-53354-8	S-17 (0-4')	112	110
880-53354-9	S-18 (0-4')	113	111
880-53354-10	S-19 (0-4')	108	106
880-53354-11	S-20 (0-4')	106	104
880-53354-12	S-21 (0-4')	110	108
880-53354-13	S-22 (4.1')	111	109
880-53354-14	S-23 (4.1')	103	101
880-53354-15	S-24 (4.1')	104	102
880-53354-16	S-25 (4.1')	101	99
LCS 880-100504/2-A	Lab Control Sample	117	130
LCSD 880-100504/3-A	Lab Control Sample Dup	119	130
MB 880-100504/1-A	Method Blank	111	111

Surrogate Legend

Surrogate Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-100498/5-A
Matrix: Solid
Analysis Batch: 100506

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 100498

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Toluene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		01/17/25 09:23	01/17/25 13:11	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		01/17/25 09:23	01/17/25 13:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:11*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*01/17/25 09:23*	*01/17/25 13:11*	*1*

Lab Sample ID: LCS 880-100498/1-A
Matrix: Solid
Analysis Batch: 100506

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100498

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08975		mg/Kg		90	70 - 130		
Toluene			0.100	0.08665		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08538		mg/Kg		85	70 - 130		
m-Xylene & p-Xylene			0.200	0.1789		mg/Kg		89	70 - 130		
o-Xylene			0.100	0.09108		mg/Kg		91	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

Lab Sample ID: LCSD 880-100498/2-A
Matrix: Solid
Analysis Batch: 100506

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 100498

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08299		mg/Kg		83	70 - 130	8	35
Toluene			0.100	0.08070		mg/Kg		81	70 - 130	7	35
Ethylbenzene			0.100	0.07780		mg/Kg		78	70 - 130	9	35
m-Xylene & p-Xylene			0.200	0.1611		mg/Kg		81	70 - 130	10	35
o-Xylene			0.100	0.08226		mg/Kg		82	70 - 130	10	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

QC Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

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

Lab Sample ID: MB 880-100504/1-A
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 100504

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		01/17/25 09:29	01/20/25 09:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 09:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		01/17/25 09:29	01/20/25 09:44	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 09:44*	*1*
o-Terphenyl	*111*		*70 - 130*	*01/17/25 09:29*	*01/20/25 09:44*	*1*

Lab Sample ID: LCS 880-100504/2-A
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 100504

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1135		mg/Kg		113	70 - 130

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

Lab Sample ID: LCSD 880-100504/3-A
Matrix: Solid
Analysis Batch: 100652

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 100504

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1065		mg/Kg		107	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	1120		mg/Kg		112	70 - 130	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*119*		*70 - 130*
o-Terphenyl	*130*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-100659/1-A
Matrix: Solid
Analysis Batch: 100689

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			01/20/25 13:25	1

QC Sample Results

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-100659/2-A
Matrix: Solid
Analysis Batch: 100689

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	236.0		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-100659/3-A
Matrix: Solid
Analysis Batch: 100689

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	236.3		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 880-53354-10 MS
Matrix: Solid
Analysis Batch: 100689

Client Sample ID: S-19 (0-4')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	<10.1	U	253	250.0		mg/Kg		98	90 - 110		

Lab Sample ID: 880-53354-10 MSD
Matrix: Solid
Analysis Batch: 100689

Client Sample ID: S-19 (0-4')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	<10.1	U	253	250.7		mg/Kg		98	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

GC VOA

Prep Batch: 100498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	5035	
880-53354-2	S-11 (0-1')	Total/NA	Solid	5035	
880-53354-3	S-12 (0-1')	Total/NA	Solid	5035	
880-53354-4	S-13 (0-1')	Total/NA	Solid	5035	
880-53354-5	S-14 (0-4')	Total/NA	Solid	5035	
880-53354-6	S-15 (0-4')	Total/NA	Solid	5035	
880-53354-7	S-16 (0-4')	Total/NA	Solid	5035	
880-53354-8	S-17 (0-4')	Total/NA	Solid	5035	
880-53354-9	S-18 (0-4')	Total/NA	Solid	5035	
880-53354-10	S-19 (0-4')	Total/NA	Solid	5035	
880-53354-11	S-20 (0-4')	Total/NA	Solid	5035	
880-53354-12	S-21 (0-4')	Total/NA	Solid	5035	
880-53354-13	S-22 (4.1')	Total/NA	Solid	5035	
880-53354-14	S-23 (4.1')	Total/NA	Solid	5035	
880-53354-15	S-24 (4.1')	Total/NA	Solid	5035	
880-53354-16	S-25 (4.1')	Total/NA	Solid	5035	
MB 880-100498/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-100498/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-100498/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 100506

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	8021B	100498
880-53354-2	S-11 (0-1')	Total/NA	Solid	8021B	100498
880-53354-3	S-12 (0-1')	Total/NA	Solid	8021B	100498
880-53354-4	S-13 (0-1')	Total/NA	Solid	8021B	100498
880-53354-5	S-14 (0-4')	Total/NA	Solid	8021B	100498
880-53354-6	S-15 (0-4')	Total/NA	Solid	8021B	100498
880-53354-7	S-16 (0-4')	Total/NA	Solid	8021B	100498
880-53354-8	S-17 (0-4')	Total/NA	Solid	8021B	100498
880-53354-9	S-18 (0-4')	Total/NA	Solid	8021B	100498
880-53354-10	S-19 (0-4')	Total/NA	Solid	8021B	100498
880-53354-11	S-20 (0-4')	Total/NA	Solid	8021B	100498
880-53354-12	S-21 (0-4')	Total/NA	Solid	8021B	100498
880-53354-13	S-22 (4.1')	Total/NA	Solid	8021B	100498
880-53354-14	S-23 (4.1')	Total/NA	Solid	8021B	100498
880-53354-15	S-24 (4.1')	Total/NA	Solid	8021B	100498
880-53354-16	S-25 (4.1')	Total/NA	Solid	8021B	100498
MB 880-100498/5-A	Method Blank	Total/NA	Solid	8021B	100498
LCS 880-100498/1-A	Lab Control Sample	Total/NA	Solid	8021B	100498
LCSD 880-100498/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	100498

Analysis Batch: 100680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	Total BTEX	
880-53354-2	S-11 (0-1')	Total/NA	Solid	Total BTEX	
880-53354-3	S-12 (0-1')	Total/NA	Solid	Total BTEX	
880-53354-4	S-13 (0-1')	Total/NA	Solid	Total BTEX	
880-53354-5	S-14 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-6	S-15 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-7	S-16 (0-4')	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

GC VOA (Continued)

Analysis Batch: 100680 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-8	S-17 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-9	S-18 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-10	S-19 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-11	S-20 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-12	S-21 (0-4')	Total/NA	Solid	Total BTEX	
880-53354-13	S-22 (4.1')	Total/NA	Solid	Total BTEX	
880-53354-14	S-23 (4.1')	Total/NA	Solid	Total BTEX	
880-53354-15	S-24 (4.1')	Total/NA	Solid	Total BTEX	
880-53354-16	S-25 (4.1')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 100504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	8015NM Prep	
880-53354-2	S-11 (0-1')	Total/NA	Solid	8015NM Prep	
880-53354-3	S-12 (0-1')	Total/NA	Solid	8015NM Prep	
880-53354-4	S-13 (0-1')	Total/NA	Solid	8015NM Prep	
880-53354-5	S-14 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-6	S-15 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-7	S-16 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-8	S-17 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-9	S-18 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-10	S-19 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-11	S-20 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-12	S-21 (0-4')	Total/NA	Solid	8015NM Prep	
880-53354-13	S-22 (4.1')	Total/NA	Solid	8015NM Prep	
880-53354-14	S-23 (4.1')	Total/NA	Solid	8015NM Prep	
880-53354-15	S-24 (4.1')	Total/NA	Solid	8015NM Prep	
880-53354-16	S-25 (4.1')	Total/NA	Solid	8015NM Prep	
MB 880-100504/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-100504/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-100504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 100652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	8015B NM	100504
880-53354-2	S-11 (0-1')	Total/NA	Solid	8015B NM	100504
880-53354-3	S-12 (0-1')	Total/NA	Solid	8015B NM	100504
880-53354-4	S-13 (0-1')	Total/NA	Solid	8015B NM	100504
880-53354-5	S-14 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-6	S-15 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-7	S-16 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-8	S-17 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-9	S-18 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-10	S-19 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-11	S-20 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-12	S-21 (0-4')	Total/NA	Solid	8015B NM	100504
880-53354-13	S-22 (4.1')	Total/NA	Solid	8015B NM	100504
880-53354-14	S-23 (4.1')	Total/NA	Solid	8015B NM	100504
880-53354-15	S-24 (4.1')	Total/NA	Solid	8015B NM	100504

QC Association Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

GC Semi VOA (Continued)

Analysis Batch: 100652 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-16	S-25 (4.1')	Total/NA	Solid	8015B NM	100504
MB 880-100504/1-A	Method Blank	Total/NA	Solid	8015B NM	100504
LCS 880-100504/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	100504
LCSD 880-100504/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	100504

Analysis Batch: 100766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Total/NA	Solid	8015 NM	
880-53354-2	S-11 (0-1')	Total/NA	Solid	8015 NM	
880-53354-3	S-12 (0-1')	Total/NA	Solid	8015 NM	
880-53354-4	S-13 (0-1')	Total/NA	Solid	8015 NM	
880-53354-5	S-14 (0-4')	Total/NA	Solid	8015 NM	
880-53354-6	S-15 (0-4')	Total/NA	Solid	8015 NM	
880-53354-7	S-16 (0-4')	Total/NA	Solid	8015 NM	
880-53354-8	S-17 (0-4')	Total/NA	Solid	8015 NM	
880-53354-9	S-18 (0-4')	Total/NA	Solid	8015 NM	
880-53354-10	S-19 (0-4')	Total/NA	Solid	8015 NM	
880-53354-11	S-20 (0-4')	Total/NA	Solid	8015 NM	
880-53354-12	S-21 (0-4')	Total/NA	Solid	8015 NM	
880-53354-13	S-22 (4.1')	Total/NA	Solid	8015 NM	
880-53354-14	S-23 (4.1')	Total/NA	Solid	8015 NM	
880-53354-15	S-24 (4.1')	Total/NA	Solid	8015 NM	
880-53354-16	S-25 (4.1')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 100659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Soluble	Solid	DI Leach	
880-53354-2	S-11 (0-1')	Soluble	Solid	DI Leach	
880-53354-3	S-12 (0-1')	Soluble	Solid	DI Leach	
880-53354-4	S-13 (0-1')	Soluble	Solid	DI Leach	
880-53354-5	S-14 (0-4')	Soluble	Solid	DI Leach	
880-53354-6	S-15 (0-4')	Soluble	Solid	DI Leach	
880-53354-7	S-16 (0-4')	Soluble	Solid	DI Leach	
880-53354-8	S-17 (0-4')	Soluble	Solid	DI Leach	
880-53354-9	S-18 (0-4')	Soluble	Solid	DI Leach	
880-53354-10	S-19 (0-4')	Soluble	Solid	DI Leach	
880-53354-11	S-20 (0-4')	Soluble	Solid	DI Leach	
880-53354-12	S-21 (0-4')	Soluble	Solid	DI Leach	
880-53354-13	S-22 (4.1')	Soluble	Solid	DI Leach	
880-53354-14	S-23 (4.1')	Soluble	Solid	DI Leach	
880-53354-15	S-24 (4.1')	Soluble	Solid	DI Leach	
880-53354-16	S-25 (4.1')	Soluble	Solid	DI Leach	
MB 880-100659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-100659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-100659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-53354-10 MS	S-19 (0-4')	Soluble	Solid	DI Leach	
880-53354-10 MSD	S-19 (0-4')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

HPLC/IC

Analysis Batch: 100689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-53354-1	S-10 (0-1')	Soluble	Solid	300.0	100659
880-53354-2	S-11 (0-1')	Soluble	Solid	300.0	100659
880-53354-3	S-12 (0-1')	Soluble	Solid	300.0	100659
880-53354-4	S-13 (0-1')	Soluble	Solid	300.0	100659
880-53354-5	S-14 (0-4')	Soluble	Solid	300.0	100659
880-53354-6	S-15 (0-4')	Soluble	Solid	300.0	100659
880-53354-7	S-16 (0-4')	Soluble	Solid	300.0	100659
880-53354-8	S-17 (0-4')	Soluble	Solid	300.0	100659
880-53354-9	S-18 (0-4')	Soluble	Solid	300.0	100659
880-53354-10	S-19 (0-4')	Soluble	Solid	300.0	100659
880-53354-11	S-20 (0-4')	Soluble	Solid	300.0	100659
880-53354-12	S-21 (0-4')	Soluble	Solid	300.0	100659
880-53354-13	S-22 (4.1')	Soluble	Solid	300.0	100659
880-53354-14	S-23 (4.1')	Soluble	Solid	300.0	100659
880-53354-15	S-24 (4.1')	Soluble	Solid	300.0	100659
880-53354-16	S-25 (4.1')	Soluble	Solid	300.0	100659
MB 880-100659/1-A	Method Blank	Soluble	Solid	300.0	100659
LCS 880-100659/2-A	Lab Control Sample	Soluble	Solid	300.0	100659
LCSD 880-100659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	100659
880-53354-10 MS	S-19 (0-4')	Soluble	Solid	300.0	100659
880-53354-10 MSD	S-19 (0-4')	Soluble	Solid	300.0	100659

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-10 (0-1')

Lab Sample ID: 880-53354-1
Matrix: Solid
Date Collected: 01/15/25 14:40
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 15:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 15:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 13:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 13:10	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 13:59	CH	EET MID

Client Sample ID: S-11 (0-1')

Lab Sample ID: 880-53354-2
Matrix: Solid
Date Collected: 01/15/25 14:45
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 16:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 16:15	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 13:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 13:27	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:04	CH	EET MID

Client Sample ID: S-12 (0-1')

Lab Sample ID: 880-53354-3
Matrix: Solid
Date Collected: 01/15/25 14:50
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 16:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 16:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 13:42	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 13:42	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:10	CH	EET MID

Client Sample ID: S-13 (0-1')

Lab Sample ID: 880-53354-4
Matrix: Solid
Date Collected: 01/15/25 14:55
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 17:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 17:08	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-13 (0-1')

Lab Sample ID: 880-53354-4
Matrix: Solid
Date Collected: 01/15/25 14:55
Date Received: 01/17/25 08:27

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			100766	01/20/25 13:58	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 13:58	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:16	CH	EET MID

Client Sample ID: S-14 (0-4')

Lab Sample ID: 880-53354-5
Matrix: Solid
Date Collected: 01/15/25 15:00
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 17:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 17:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 14:13	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 14:13	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:33	CH	EET MID

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

Lab Sample ID: 880-53354-6
Matrix: Solid
Date Collected: 01/15/25 15:05
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 18:01	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 18:01	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 14:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 14:29	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:39	CH	EET MID

Client Sample ID: S-16 (0-4')

Lab Sample ID: 880-53354-7
Matrix: Solid
Date Collected: 01/15/25 15:10
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 19:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 19:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 14:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 14:45	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-16 (0-4')

Lab Sample ID: 880-53354-7
Matrix: Solid
Date Collected: 01/15/25 15:10
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:44	CH	EET MID

Client Sample ID: S-17 (0-4')

Lab Sample ID: 880-53354-8
Matrix: Solid
Date Collected: 01/15/25 15:15
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 20:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 20:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 15:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 15:01	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:50	CH	EET MID

Client Sample ID: S-18 (0-4')

Lab Sample ID: 880-53354-9
Matrix: Solid
Date Collected: 01/15/25 15:20
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 20:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 20:39	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 16:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 16:59	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 14:56	CH	EET MID

Client Sample ID: S-19 (0-4')

Lab Sample ID: 880-53354-10
Matrix: Solid
Date Collected: 01/15/25 15:25
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 21:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 21:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 17:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 17:14	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:01	CH	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-20 (0-4')
Date Collected: 01/15/25 15:30
Date Received: 01/17/25 08:27

Lab Sample ID: 880-53354-11
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	5035			4.95 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 21:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 21:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 17:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 17:30	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:18	CH	EET MID

Client Sample ID: S-21 (0-4')
Date Collected: 01/15/25 15:35
Date Received: 01/17/25 08:27

Lab Sample ID: 880-53354-12
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	5035			4.99 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 21:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 21:58	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 17:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 17:45	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:24	CH	EET MID

Client Sample ID: S-22 (4.1')
Date Collected: 01/15/25 15:40
Date Received: 01/17/25 08:27

Lab Sample ID: 880-53354-13
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	5035			5.03 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 22:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 22:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 18:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 18:01	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:41	CH	EET MID

Client Sample ID: S-23 (4.1')
Date Collected: 01/15/25 15:45
Date Received: 01/17/25 08:27

Lab Sample ID: 880-53354-14
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	5035			5.02 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 22:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 22:51	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Client Sample ID: S-23 (4.1')

Lab Sample ID: 880-53354-14
Matrix: Solid
Date Collected: 01/15/25 15:45
Date Received: 01/17/25 08:27

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			100766	01/20/25 18:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 18:16	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:47	CH	EET MID

Client Sample ID: S-24 (4.1')

Lab Sample ID: 880-53354-15
Matrix: Solid
Date Collected: 01/15/25 15:50
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	100498	01/17/25 09:23	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 23:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 23:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 18:30	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 18:30	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:52	CH	EET MID

Client Sample ID: S-25 (4.1')

Lab Sample ID: 880-53354-16
Matrix: Solid
Date Collected: 01/15/25 15:55
Date Received: 01/17/25 08:27

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	100498	01/17/25 10:45	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	100506	01/17/25 23:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			100680	01/17/25 23:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			100766	01/20/25 18:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	100504	01/17/25 09:29	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	100652	01/20/25 18:47	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	100659	01/20/25 10:05	SI	EET MID
Soluble	Analysis	300.0		1			100689	01/20/25 15:58	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: ARU 13

Job ID: 880-53354-1
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
Total BTEX		Solid	Total BTEX

Method Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
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
5035	Closed System Purge and Trap	SW846	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.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Crain Environmental
Project/Site: ARU 13

Job ID: 880-53354-1
SDG: Lea Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-53354-1	S-10 (0-1')	Solid	01/15/25 14:40	01/17/25 08:27	0-1'
880-53354-2	S-11 (0-1')	Solid	01/15/25 14:45	01/17/25 08:27	0-1'
880-53354-3	S-12 (0-1')	Solid	01/15/25 14:50	01/17/25 08:27	0-1'
880-53354-4	S-13 (0-1')	Solid	01/15/25 14:55	01/17/25 08:27	0-1'
880-53354-5	S-14 (0-4')	Solid	01/15/25 15:00	01/17/25 08:27	0-4'
880-53354-6	S-15 (0-4')	Solid	01/15/25 15:05	01/17/25 08:27	0-4'
880-53354-7	S-16 (0-4')	Solid	01/15/25 15:10	01/17/25 08:27	0-4'
880-53354-8	S-17 (0-4')	Solid	01/15/25 15:15	01/17/25 08:27	0-4'
880-53354-9	S-18 (0-4')	Solid	01/15/25 15:20	01/17/25 08:27	0-4'
880-53354-10	S-19 (0-4')	Solid	01/15/25 15:25	01/17/25 08:27	0-4'
880-53354-11	S-20 (0-4')	Solid	01/15/25 15:30	01/17/25 08:27	0-4'
880-53354-12	S-21 (0-4')	Solid	01/15/25 15:35	01/17/25 08:27	0-4'
880-53354-13	S-22 (4.1')	Solid	01/15/25 15:40	01/17/25 08:27	4.1'
880-53354-14	S-23 (4.1')	Solid	01/15/25 15:45	01/17/25 08:27	4.1'
880-53354-15	S-24 (4.1')	Solid	01/15/25 15:50	01/17/25 08:27	4.1'
880-53354-16	S-25 (4.1')	Solid	01/15/25 15:55	01/17/25 08:27	4.1'

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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

880-53354 Chain of Custody

www.xenco.com Page 1 of 2

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane
Address:	2925 E. 17th St.	Address:	310 W. Wall, Ste. 300
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79701
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:	ARU 13	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:	IR5
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-.1
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.9
Total Containers:		Corrected Temperature:	4.8

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	TPH 8015M	BTEX	Chlorides	Sample Comments
S-10 (0-1')	S	1/15/25	1440	0-1'	C	1		X	X	X	
S-11 (0-1')			1445	0-1'							
S-12 (0-1')			1450	0-1'							
S-13 (0-1')			1455	0-1'							
S-14 (0-4')			1500	0-4'							
S-15 (0-4')			1505	0-4'							
S-16 (0-4')			1510	0-4'							
S-17 (0-4')			1515	0-4'							
S-18 (0-4')			1520	0-4'							
S-19 (0-4')			1525	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		1/17 827	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: _____

www.xenco.com Page 2 of 2

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane
Address:	2925 E. 17th St.	Address:	310 W. Wall, Ste. 300
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Midland, TX 79701
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:	ARU 13	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:		
Cooler Custody Seals:	Yes No N/A	Correction Factor:		
Sample Custody Seals:	Yes No N/A	Temperature Reading:		
Total Containers:		Corrected Temperature:		

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	BTEX	Chlorides	Sample Comments
S-20 (0-4')	S	1/15/25	1530	0-4'	C	1		X	X	X	
S-21 (0-4')			1535	0-4'							
S-22 (4.1')			1540	4.1'							
S-23 (4.1')			1545	4.1'							
S-24 (4.1')			1550	4.1'							
S-25 (4.1')	↓	↓	1555	4.1'	↓	↓		↓	↓	↓	

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		1/17 827	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-53354-1
SDG Number: Lea Co. NM

Login Number: 53354
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	

Appendix D: Photographic Documentation

APPENDIX D
PHOTOGRAPHIC DOCUMENTATION
ANDERSON RANCH UNIT #013
INCIDENT #nAPP2426256273

View to N of staining at wellhead (8/28/24).

View to SW of treated area (9/25/24).

View to SE of sample S-6 (9/25/24).

View to S of sample S-9 (9/25/24).

View to W of excavation N and E of wellhead (1/15/25).

View to NW of excavation N and E of wellhead (1/15/25).

View to N of excavation W of wellhead (1/15/25).

Appendix E: Waste Manifests

GML inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111557
01/22/25 02:50 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 54
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM Inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111521
01/22/25 09:49 AM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 54
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

KIMBERLY MURPHY

Name Signature

GM inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111542
01/22/25 12:26 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA
Address:
Phone No.:

Driver Name:
Truck Number: 54
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111633
01/27/25 01:38 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 54
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111614
01/27/25 11:15 AM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 54
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111634
01/27/25 01:40 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 56
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: *Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety.* (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GML Inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111651
01/28/25 09:40 AM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 56
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: *Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety.* (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM Inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111661
01/28/25 12:00 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 56
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: *Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety.* (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GML Inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111615
01/27/25 11:16 AM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 56
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

☐ RCRA NON-EXEMPT: Oil field waste which is non-hazardous that does not exceed the minimum standards for waste hazardous by characteristics established in RCRA regulations, 40 CFR 261.21-261-24, or listed hazardous waste as defined by 40 CFR, part 261, subpart D, as amended. The following documentation demonstrating the waste as non-hazardous is attached:

☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

GM inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST / DISPOSAL TICKET

GENERATOR

Generator Name Grand Banks 74132

Address

City, State, Zip

Phone No.

Company Man

Location of Origin
Lease/Well Artesia

Name & No.

County

API No.

Rig Name & No.

AFE/PO No.

TRUCK TIME STAMP

IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill

Site Name / Permit No. **Commercial Landfill (NM-01-0019)**

Address **P.O. Box 1658 Roswell, NM 88202**

Phone No. 575-347-0434

NORM Readings Taken? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

TRANSPORTER

Transporter's Name Pondarosa

Address

Phone No.

Print Name

Truck No. 56

Bin No.

Phone No.

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

SHIPMENT DATE _____ DRIVER'S SIGNATURE _____

DELIVERY DATE 1-29-25 DRIVER'S SIGNATURE _____

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds		Completion Fluid/Flowback		OTHER EXEMPT WASTE	
Oil Based Cuttings		Produced Water (Non-Injectable)			
Water Based Muds		Gathering Line Water/Waste			
Water Based Cuttings		Cement Water			
Produced Formation Solids		Truck Washout /Jet Out		OTHER NON-EXEMPT WASTE	
Tank Bottoms	1	Trash & Debris			
E&P Contaminated Soil					
Gas Plant Waste					

WASTE GENERATION PROCESS: ❑ Drilling ❑ Completion ❑ Production ❑ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____ *Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid 20 Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

❑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

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❑ MSDS Information ❑ RCRA Hazardous Waste Analysis ❑ Other (Provide Description Below)

❑ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

(PRINT) AUTHORIZED AGENTS SIGNATURE _____ DATE _____ SIGNATURE _____

GMI

GML inc.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
111693
01/29/25 01:48 PM

GENERATOR

Generator: GRAND BANK ENERGY CO
Generator Contact: EDDIE JARAMILLO
10 DESTA DR, STE 300 E
MIDLAND, TX 79705
Phone No.: (222)222-2222

Lease: ARU #13
Location: ARU #13
Job Contact: CHRIS GADDY
Phone Number: (432)620-9481
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfill (NM-01-0019)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435

NORM Readings Taken: No
Reading > 50 micro roentgens: No
Pass the Paint Filter Test: No
Box Number:

WASTE MATERIAL

Material	Quantity	Cell
OCD EXEMPT SOILS	20.00 YDS	LF

TRANSPORTER

Name: PONDEROSA TRUCKING
Address:
Phone No.:

Driver Name:
Truck Number: 41
Phone No.:

I Hearby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed above.

Driver Signature

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is:

☒ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

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☐ MSDS Information ☐ RCRA Hazardous Waste Analysis

Other (Provide Description Below)

☐ Emergency Non-Oilfield: *Emergency non-hazardous, non-oilfied waste that has been ordered by the Department of Public Safety.* (The order, documentation of non-hazardous waste determination, and a description of the waste must accompany this form.)

Name Signature

Billy Jack Clayton

Name Signature

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST / DISPOSAL TICKET

GM inc.

74186

GENERATOR

Generator Name _____

Address _____

_____

City, State, Zip _____

Phone No. _____

Company Man _____

Location of Origin

Lease/Well _____

Name & No. _____

County _____

API No. _____

Rig Name & No. _____

AFE/PO No. _____

TRUCK TIME STAMP

IN: _____ OUT: _____

DISPOSAL FACILITY

RECEIVING AREA

Name/No. Landfill

Site Name / Permit No. **Commercial Landfill (NM-01-0019)**

Phone No. **575-347-0434**

Address **P.O. Box 1658 Roswell, NM 88202**

NORM Readings Taken? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

Pass the Paint Filter Test? (Circle One) YES NO

TRANSPORTER

Transporter's Name _____

Address _____

_____

Phone No. _____

Print Name _____

Truck No. _____

Bin No. _____

Phone No. _____

I hereby certify that the above named material(s) was/were picked up at the Generator's site listed above and delivered without incident to the disposal facility listed below.

_____ SHIPMENT DATE

_____ DRIVER'S SIGNATURE

_____ DELIVERY DATE

_____ DRIVER'S SIGNATURE

Exempt E&P Waste/Service Identification and Amount (Place volume next to waste type in barrels or cubic yards)

Oil Based Muds	_____	Completion Fluid/Flowback	_____	OTHER EXEMPT WASTE	
Oil Based Cuttings	_____	Produced Water (Non-Injectable)	_____		
Water Based Muds	_____	Gathering Line Water/Waste	_____		
Water Based Cuttings	_____	Cement Water	_____		
Produced Formation Solids	_____	Truck Washout /Jet Out	_____	OTHER NON-EXEMPT WASTE	
Tank Bottoms	_____	Trash & Debris	_____		
E&P Contaminated Soil	_____				
Gas Plant Waste	_____				

WASTE GENERATION PROCESS: ❑ Drilling ❑ Completion ❑ Production ❑ Gathering Lines

Non-Exempt E&P Waste/Service Identification and Amount

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

Non-Exempt Other: _____ *Please select from Non-Exempt Waste List on back

QUANTITY: _____ B - Barrels _____ L - Liquid _____ Y - Yards _____ E - Each

C-138

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency's July 1988 regulatory determination, the above described waste load is (Check the appropriate classification)

❑ RCRA EXEMPT: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non-exempt waste. (Gandy Marley, Inc. accepts certifications on a per month only basis.)

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❑ MSDS Information ❑ RCRA Hazardous Waste Analysis ❑ Other (Provide Description Below)

_____

❑ EMERGENCY NON-OILFIELD: Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Public Safety. (The order, documentation of non-hazardous waste determination and a description of the waste must accompany this form.)

_____ (PRINT) AUTHORIZED AGENTS SIGNATURE

_____ DATE

_____ SIGNATURE

_____ NAME (PRINT)

_____ DATE

GMI TITLE

_____ SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

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

Operator: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2426256273**
Incident Name	**NAPP2426256273 ANDERSON RANCH UNIT #013 @ 30-025-00391**
Incident Type	**Oil Release**
Incident Status	**Remediation Closure Report Received**
Incident Well	**[30-025-00391] ANDERSON RANCH UNIT #013**

Location of Release Source	
Please answer all the questions in this group.	
Site Name	ANDERSON RANCH UNIT #013
Date Release Discovered	03/29/2024
Surface Owner	State

Incident Details	
Please answer all the questions in this group.	
Incident Type	Oil 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	Cause: Normal Operations | Well | Crude Oil | Released: 7 BBL | Recovered: 0 BBL | Lost: 7 BBL.
Produced Water Released (bbls) Details	*Not answered.*
Is the concentration of chloride in the produced water >10,000 mg/l	No
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)	The Anderson Ranch Unit #013 release at the wellhead is being remediated/reclaimed according to State Land Office (SLO) specifications. This is a historical release.

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 (continued)

Operator: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	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	**No**
Reasons why this would be considered a submission for a notification of a major release	*Unavailable.*
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Socorro Hendry Title: Regulatory Manager Email: socorro.hendry@octane-energy.com Date: 03/24/2025

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 (continued)

Operator: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	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	U.S. Geological Survey
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)	Between 100 and 200 (ft.)
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	Greater than 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	Between 100 and 200 (ft.)
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	Between 100 and 200 (ft.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	1280
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	420
GRO+DRO (EPA SW-846 Method 8015M)	420
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	08/20/2024
On what date will (or did) the final sampling or liner inspection occur	01/15/2025
On what date will (or was) the remediation complete(d)	01/29/2025
What is the estimated surface area (in square feet) that will be reclaimed	884
What is the estimated volume (in cubic yards) that will be reclaimed	240
What is the estimated surface area (in square feet) that will be remediated	884
What is the estimated volume (in cubic yards) that will be remediated	240
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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State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS (continued)

Operator: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	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	TNM-55-95 [fAB0000000061]
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	*Not answered.*
OR is the **off-site** disposal site, to be used, an NMED facility	*Not answered.*
(Ex Situ) Excavation and **on-site** remediation (i.e. On-Site Land Farms)	*Not answered.*
(In Situ) Soil Vapor Extraction	*Not answered.*
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	*Not answered.*
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
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: Socorro Hendry Title: Regulatory Manager Email: socorro.hendry@octane-energy.com Date: 03/24/2025
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: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	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: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	**433529**
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	**02/25/2025**
What was the (estimated) number of samples that were to be gathered	**4**
What was the sampling surface area in square feet	**100**

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	884
What was the total volume (cubic yards) remediated	240
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	884
What was the total volume (in cubic yards) reclaimed	240
Summarize any additional remediation activities not included by answers (above)	Upon NMOCD approval of this Closure Report, the excavation will be backfilled to grade with nonimpacted similar material obtained from a nearby 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.

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: Socorro Hendry Title: Regulatory Manager Email: socorro.hendry@octane-energy.com Date: 03/24/2025

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QUESTIONS (continued)

Operator:	OGRID:
GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	155471
	Action Number: 445157
	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: GRAND BANKS ENERGY CO 310 W Wall St. Midland, TX 79701	OGRID: 155471
	Action Number: 445157
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvelez	None	6/16/2025