



Revised Remediation Summary and Closure Report

March 31, 2025

**Chem State #004
API No. 30-025-23075
Incident No. nAPP2426161980
Lea County, New Mexico**

Prepared For:

Octane Energy
(For Cambrian Management Ltd.)
310 West Wall Street, Suite 300
Midland, Texas 79701

Prepared By:

Crain Environmental
2925 East 17th Street
Odessa, Texas 79761

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

Cynthia K. Crain, P.G.



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1.0 Introduction

Crain Environmental (CE), on behalf of Octane Energy (Octane) for Cambrian Management Ltd. (Cambrian), has prepared this Revised Remediation Summary and Closure Report for the crude oil release at Chem State #004 (Site), located approximately 23 miles northwest of Lovington, in Lea County, New Mexico. The global positioning system (GPS) coordinates for the release point are 33.0441246, -103.7162781. The property surface rights are owned by the State of New Mexico. Land use in the Site vicinity is primarily oil and gas production activity and cattle grazing. The location of the Site is depicted on Figure 1.

2.0 Background

Pending Cambrian plans to plug and abandon (P&A) the Chem State #4 well, CE conducted a site inspection on October 25, 2023, and hydrocarbon staining was observed at the wellhead.

On December 14, 2023, Octane received a letter from the New Mexico State Land Office (SLO) Environmental Compliance Office (ECO) that provided results of a historical aerial review, and notification of a suspected release around the wellhead.

On March 12, 2024, CE conducted an initial soil investigation at the area around the wellhead and provided a Notice of Violation (NOV) to the New Mexico Oil Conservation Division (NMOCD) on September 17, 2024. On September 18, 2024, an Initial C-141 was provided to the NMOCD for Incident #nAPP2426161980.

Soil remediation and P&A activities were conducted, and a Remediation Summary and Closure Report was submitted to the NMOCD on January 23, 2025. On January 31, 2025, NMOCD denied remediation closure for the following reasons:

- Based on information provided on the scaled Figure 2, Soil Sample Analytical Results Map the excavation measured approximately 1,050 square feet. The C-141 indicates that the square footage of the area remediated was 500 square feet.
- Based on the information provided on Figure 2, an adequate amount of base samples were not collected as OCD has not approved an alternative composite and grab sample plan for this incident.
- Operator failed to provide proper Sampling Notification. Samples collected on 9/26/24 were collected at 1230 but the C-141N indicates samples were to be collected starting at 200 AM. Samples collected on 11/4/24 were collected at 1000 AM but the C-141N indicates samples were to be collected starting at 1130 AM.
- Chain of custody for samples collected on 11/4/24 does not match sample results. Chain of Custody indicates that it is for the Chem State #1.
- Submit a complete and accurate report through the OCD permitting website by 4/20/25.

This Revised Remediation Summary and Closure Report addresses NMOCD concerns and is being submitted in accordance with 19.15.29.11 New Mexico Administrative Code (NMAC) for this historical release. NMOCD Communication is included in Appendix A.



3.0 NMOCD Closure Criteria

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

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
- Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary highwater mark).
- Within 300 feet from an occupied permanent residence, school, hospital, institution or church.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
- Within 1,000 feet of any fresh water well or spring.
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
- Within 300 feet of a wetland.
- Within the area overlying a subsurface mine.
- Within an unstable area such as a karst formation.
- Within a 100-year floodplain.

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

3.1 Groundwater Evaluation

A review of the New Mexico Office of the State Engineer (NMOSE) records indicated one well (L 15570 POD 1) within a 0.5-mile radius of the Site with a recorded depth to groundwater, and one well (L 06654) with no record of water depth. Well L 15570 was installed in October of 2023 to a depth of 107 feet below ground surface (bgs). Groundwater was not encountered in the well, and the boring was plugged on October 11, 2023. Well L 06654 was drilled to a depth of 200 feet bgs on March 13, 1970.

A review of United State Geological Survey (USGS) records indicated two wells (USGS 330225103432502 and USGS 330223103432501) within a 0.5-mile radius of the Site. Each well shows recorded depths to groundwater greater than 190' bgs; however, the records are more than 25 years old.

All wells within a 0.5-mile radius are listed on 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 15570 POD 1	Approx. 2,607 feet to E	2023	N/A	107 / DRY
L 06654	Approx. 4,038 feet to N	1970	N/A	200 / Unknown
USGS 330225103432502	Approx. 2,102 feet to SW	1966	N/A	Unknown / 192.12
USGS 330223103432501	Approx. 2,482 feet to SW	1970	N/A	Unknown / 192.34

3.2 Surface Features and Other Development

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

- Within 300 feet of any continuously flowing watercourse or any other significant watercourse.
 - No continuously flowing watercourses (rivers, streams, arroyos, etc.) are apparent within 300 feet of the Site in the topographic map (Figure 1).
- Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary highwater mark).
 - The topographic map (Figure 1) indicates there is not a lakebed, sinkhole or playa lake located within 200 feet of the Site.
- Within 300 feet from an occupied permanent residence, school, hospital, institution or church.
 - The Site Location Map (Figure 1) and information available from the Lea County, New Mexico Central Appraisal District do not show or list any permanent residence, school, hospital, institution or church located within 300 feet of the Site.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
 - No wells or springs located within 500 feet of the Site appear in any of the NMOSE records reviewed by CE. A freshwater pond is located approximately 2,604 southeast of the Site.
- 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. Freshwater emergent wetlands are located approximately 4,780 feet northwest and approximately 4,347 feet northeast of the Site.
- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
 - Based on the property and other records review by CE, the Site is not located in incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within the area overlying a subsurface mine.
 - Based on the property and other records reviewed by CE, the Site is not located within an area overlying a subsurface mine.



3.3 Wetlands, Floodplain, and Karst Geology

A review of the United States Fish and Wildlife Service (USFWS) wetlands map indicated the Site is not located within 300 feet of a wetland; however, freshwater emergent wetlands are located approximately 4,780 feet northwest and 4,347 feet northeast of the Site, and a freshwater pond is located approximately 2,604 feet southeast of the Site. The New Mexico Bureau of Land Management (BLM) karst potential map indicates the Site is located within a “low karst potential” area. Finally, review of the Federal Emergency Management Act (FEMA) floodplain map indicates the release at the Site is located outside of a 100-year floodplain. Figures 4, 5, and 6 depict the USFWS map, the FEMA floodplain map, and the karst potential map, respectively.

3.4 Closure Criteria Currently Assumed Applicable to the Site

From the surface to a depth of 4' bgs, the most stringent Closure Criteria will apply. At depths greater than 4' bgs, the Closure Criteria will be based on the estimated depth to groundwater, which dictates the least stringent regulatory guidelines typically associated with groundwater depths greater than 100 feet bgs. 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.

5.0 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.

5.1 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.

5.2 Depth to Groundwater

As discussed in Section 3.1, the depth to groundwater is greater than 100' bgs.

5.3 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 freshwater emergent wetlands are located approximately 4,780 feet northwest and 4,347 feet northeast of the Site, and a freshwater pond is located approximately 2,604 feet southeast of the Site. There were no other water sources, springs, or other sources of freshwater extraction identified within 0.5-mile of the Site.

5.4 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.

5.5 Summary of Remediation Activities

On March 12, 2024, a soil sample was collected at one location (S-1) using a backhoe. Samples collected at depths of 1' bgs and 4.2' bgs were placed in laboratory prepared containers, properly labeled, immediately placed on ice, and hand delivered to Eurofins Environment Testing (Eurofins) in Midland, Texas for analysis of total petroleum hydrocarbons (TPH) by EPA Method SW846 8015 Modified, benzene, toluene, ethylbenzene, and xylenes (collectively referred to as BTEX) by EPA Method SW 846 8021B, and chlorides by EPA Method 300.0.



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, concentrations of BTEX were reported below the test method detection limits or Closure Criteria in each sample. Concentrations of TPH were reported above the Closure Criteria in samples S-1 (1') [4,440 mg/kg] and S-1 (4.2') [3,000 mg/kg].

Excavation was conducted until confirmation samples were collected from the bottom and sidewalls of the excavation on September 26, November 4, and December 18, 2024. 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 1 provides a summary of the laboratory results, and sample locations are provided on Figure 2. The laboratory reports and chain of custody documentation are provided in Appendix C. Photographic documentation is provided in Appendix D.

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

Following denial of the January 23, 2025, Remediation Summary and Closure Report, two five-point composite samples (S-6 and S-7) were collected from the bottom the excavation, and one five-point composite sample (S-2) was collected from the north side wall. ECO personnel were in attendance to observe the sample collection.

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

Referring to Table 1, concentrations of all final TPH, BTEX, and chlorides were reported below the NMOCD Closure Criteria in all confirmation samples. The dimensions of the final excavation measured 20' x 25' and covered a surface area of 500 square feet.

On September 17, October 8 to October 14, October 28, and December 19, 2024, a total of 600 cubic yards (cy) of excavated soil were hauled to disposal at GM Inc. Waste Manifests are provided in Appendix E.

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. The dimensions of the final excavation measured 20' x 25' and covered a surface area of 500 square feet.

5.6 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reported in Job Numbers 880-40929-1, 880-49104-1, 880-50851-2, 880-52510-1, and 880-54894-1 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.

6.0 Request for Closure

A total of 600 cubic yards of soil was excavated and hauled to disposal at GM Inc. All confirmation samples collected from the bottom and sidewalls of the excavation reported TPH, Benzene, BTEX, and chloride concentrations below the NMOCD Closure Criteria.

Upon NMOCD approval of this Closure Report, the excavation will be backfilled to grade with non-impacted similar material obtained from a 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 dimensions of the final excavation measured 20' x 25' and covered a surface area of 500 square feet.

As the Chem State #004 well has been plugged and abandoned, the backfilled excavation and well pad will be cross ripped to a minimum of 18 inches with a furrow spacing of 2 feet, and seeding will be conducted during the first growing season of 2025 (i.e. spring of 2025). Seeding will be conducted by seed drill method using the Loamy (L) NMSLO Seed Mix (planted in the amount specified in the pounds live seed (PLS) per acre), and fresh water will be applied for two consecutive weeks following re-seeding.

The site will be monitored for vegetation growth to ensure that the reclamation activities performed were sufficient. Annual inspections (at a minimum) will take place on the location until revegetation is consistent with local natural vegetation density, and a Final Reclamation Report will be submitted when vegetation has been established to within 75% of natural conditions.

On behalf of Cambrian Management Ltd, Octane respectfully requests the closure of Incident # nAPP2426161980.



7.0 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: New Mexico State Land Office
Environmental Compliance Office
Via email: eco@nmslo.gov



TABLE

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
CAMBRIAN MANAGEMENT, LTD.
CHEM STATE #004



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
NMOCD Closure Criteria (>4' bgs)				GRO + DRO = 1,000		-	2,500	10	-	-	-	50	20,000
S-1 (1')	03/12/24	1'	Excavated	166	4,020	258	4,440	<0.00202	0.00261	0.0133	0.192	0.208	3,140
S-1 (4.2')	03/12/24	4.2'	Excavated	<50.1	2,820	182	3,000	<0.00200	<0.00200	<0.00200	0.0174	0.0174	2,890
S-1 (4.5')	09/26/24	4.5'	In Situ	<49.8	<49.8	<49.8	<49.8	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	7,790
S-2 (0-4')	09/26/24	0-4'	Excavated	<49.7	<49.7	<49.7	<49.7	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	3,710
S-2 (0-4.5')	11/04/24	0-4.5'	In Situ	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	387
S-2 (0-4.5')	02/25/25	0-4.5'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	33.3
S-3 (0-4')	09/26/24	0-4'	Excavated	<50.0	<50.0	<50.0	<50.0	<0.00199	<0.00199	<0.00199	<0.00398	<0.00398	825
S-3 (0-4.5')	11/04/24	0-4.5'	Excavated	<49.8	<49.8	<49.8	<49.8	--	--	--	--	--	1,640
S-3 (0-4.5')	12/18/24	0-4.5'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	64.6
S-4 (0-4')	09/26/24	0-4'	Excavated	<49.9	112	<49.9	112	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	1,120
S-4 (0-4.5')	11/04/24	0-4.5'	Excavated	<50.0	<50.0	<50.0	<50.0	--	--	--	--	--	2,990
S-4 (0-4.5')	12/18/24	0-4.5'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	86.5
S-5 (0-4')	09/26/24	0-4'	Excavated	<49.8	<49.8	<49.8	<49.8	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	2,240
S-5 (0-4.5')	11/04/24	0-4.5'	Excavated	<49.7	<49.7	<49.7	<49.7	--	--	--	--	--	696
S-5 (0-4.5')	12/18/24	0-4.5'	In Situ	<50.0	<50.0	<50.0	<50.0	<0.00200	<0.00200	<0.00200	<0.00399	<0.00399	82.1
S-6 (4.5')	02/25/25	4.5'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00202	<0.00202	<0.00202	<0.00403	<0.00403	196
S-7 (4.5')	02/25/25	4.5'	In Situ	<49.7	<49.7	<49.7	<49.7	<0.00201	<0.00201	<0.00201	<0.00402	<0.00402	264

- 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 and italic font indicates soil was excavated, sprayed with Microblaze, and returned to excavation.






FIGURES






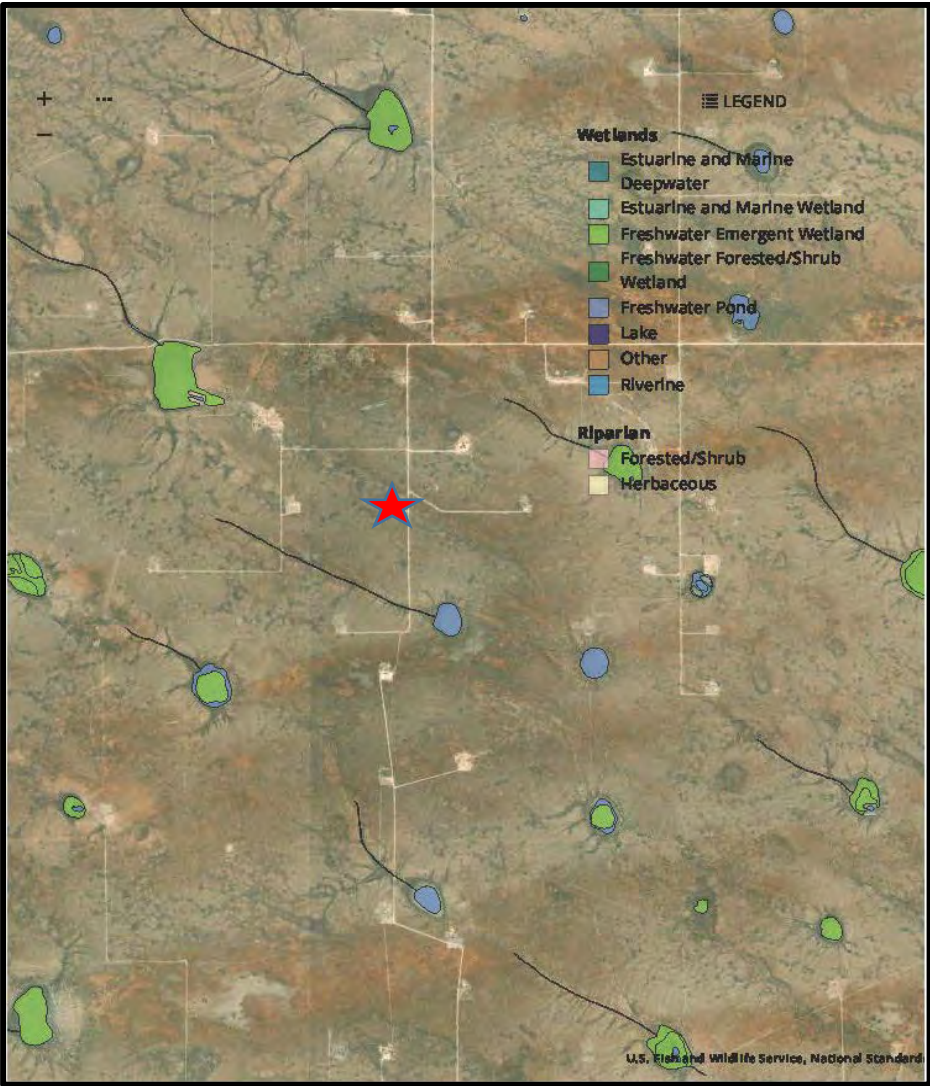
LEGEND:  Site Location Base Map From Google Earth Pro	Figure 1 Site Location Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: Jan. 21, 2025	
		GPS: 33.0441246° -103.7162781°	





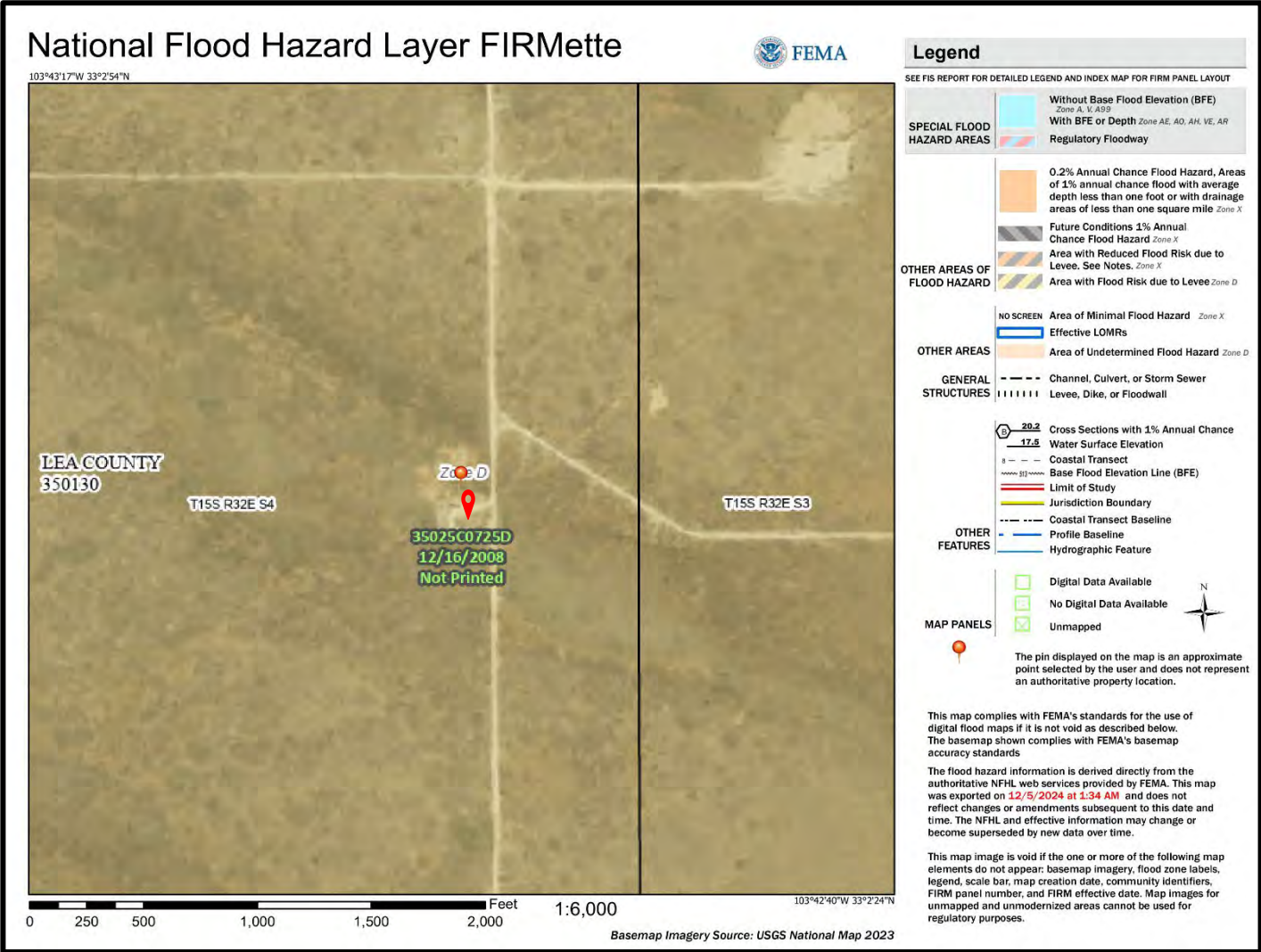
LEGEND:  Sample Location with Sample Number  Excavation Boundary Base Map From Google Earth Pro	Figure 2 Soil Sample Analytical Results Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: March 31, 2025	
		GPS: 33.0441246° -103.7162781°	





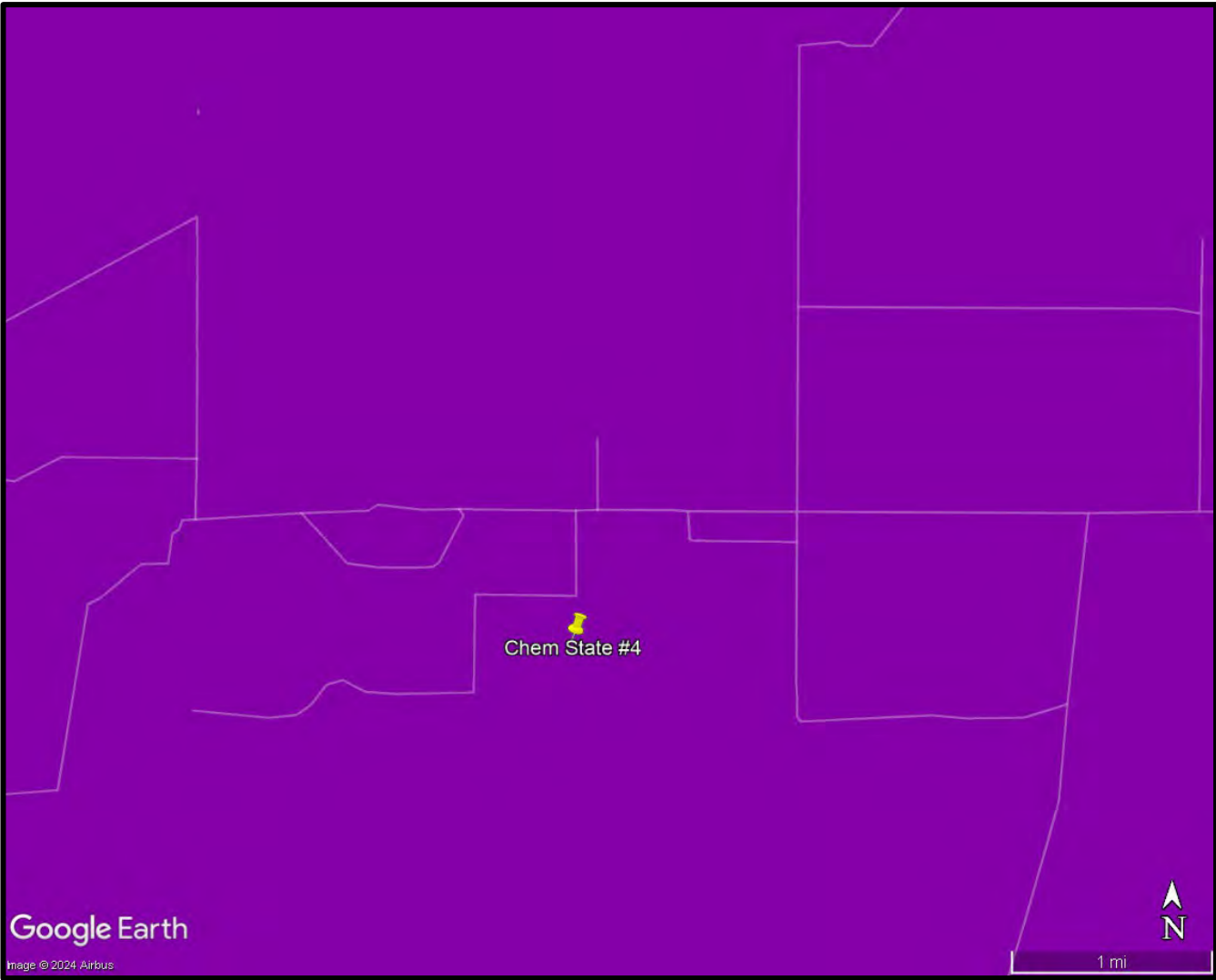
LEGEND:  Site Location  Water Well Locations Base Map From Google Earth Pro	Figure 3 Wellhead Protection Area Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: Jan. 21, 2025	
		GPS: 33.0441246° -103.7162781°	




LEGEND:  Site Location Base Map From US Fish & Wildlife Service	Figure 4 National Wetlands Inventory Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: Jan. 21, 2025	
		GPS: 33.0441246° -103.7162781°	



LEGEND:  Site Location Base Map From FEMA	Figure 5 FEMA Floodplain Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: Jan. 21, 2025	
		GPS: 33.0441246° -103.7162781°	



LEGEND: <div><div></div>Low Karst Potential</div> <div><div></div>Medium Karst Potential</div> <div><div></div>High Karst Potential</div> Base Map From Google Earth Pro and BLM	Figure 6 Karst Potential Map Cambrian Management Chem State #004 Lea County, New Mexico		
		Drafted by: CC Checked by: CC	
		Draft: Jan. 21, 2025	
		GPS: 33.0441246° -103.7162781°	



Appendix A: NMOCD Communication

Cambrian Management - Chem State #004 (Incident #nAPP2426161980) - Extension Request

Inbox

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

Sat, Dec 14, 3:37 PM (9 days ago)



to Nelson,, Chris

Nelson,

Remediation is being conducted at the Cambrian Management (Cambrian) Chem State #004 wellhead; however, the most recent bottom and sidewall samples collected on November 14, 2024, reported concentrations above the Closure Criteria. Additional excavation has been conducted and confirmation samples will be collected on December 18, 2024.

As a Closure Report is due to the OCD by December 17, 2024, Cambrian respectfully requests a 90-day extension for submission of the Report. Every effort will be made to submit 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**

2:22 PM (6 hours ago)



to me

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 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 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 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 2:37 PM**To:** Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>**Cc:** Chris Gaddy <chris.gaddy@octane-energy.com>**Subject:** [EXTERNAL] Cambrian Management - Chem State #004 (Incident #nAPP2426161980) - Extension Request

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

Nelson,

Remediation is being conducted at the Cambrian Management (Cambrian) Chem State #004 wellhead; however, the most recent bottom and sidewall samples collected on November 12/23/24, 8:31 PM
reported concentrations above the Closure Criteria. Additional excavation has been conducted and confirmation samples will be collected on December 18, 2024.

As a Closure Report is due to the OCD by December 17, 2024, Cambrian respectfully requests a 90-day extension for submission of the Report. Every effort will be made to submit 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
...

[Message clipped] [View entire message](#)



Cindy Crain

to Chris, Nelson, 

Thank you, Nelson -

I will let you know if I have any questions.

Have a Merry Christmas!

Cindy Crain

8:30 PM (0 minutes ago)





Cindy Crain <cindy.crain@gmail.com>

The Oil Conservation Division (OCD) has rejected the application, Application ID: 423980

4 messages

OCDOnline@state.nm.us <OCDOnline@state.nm.us>
To: cindy.crain@gmail.com

Fri, Jan 31, 2025 at 12:58 PM

To whom it may concern (c/o Cindy Crain for CAMBRIAN MANAGEMENT LTD),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2426161980, for the following reasons:

- Remediation closure denied.
- Based on information provided on the scaled Figure 2, Soil Sample Analytical Results Map the excavation measured approximately 1,050 square feet. The C-141 indicates that the square footage of the area remediated was 500 square feet.
- Pursuant to 19.15.29.12 D. (1)(c) NMAC, Alternately, without division approval, the responsible party may elect to perform a composite and grab sample plan of the remediated area where each composite sample is not representative of more than 200 square feet. Based on the information provided on Figure 2, an adequate amount of base samples were not collected as OCD has not approved an alternative composite and grab sample plan for this incident.
- Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and the OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC. Samples collected on 9/26/2024 were collected at 1230 but the C-141N indicates samples were to be collected starting at 200 AM. Samples collected on 11/4/2024 were collected at 1000 AM but the C-141N indicates samples were to be collected starting at 1130 AM.
- Chain of custody for samples collected on 11/4/2024 does not match sample results. Chain of Custody indicates that it is for the Chem State #1.
- Submit a complete and accurate report through the OCD permitting website by 4/30/2025.

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 423980.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,
Brittany Hall
Projects Environmental Specialist - A
505-517-5333
Brittany.Hall@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department
[1220 South St. Francis Drive](#)
[Santa Fe, NM 87505](#)

Cindy Crain <cindy.crain@gmail.com>

Sun, Feb 16, 2025 at 2:16 PM

To: "Hall, Brittany, EMNRD" <brittany.hall@emnrd.nm.gov>Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, Chris Gaddy <chris.gaddy@octane-energy.com>,"Biernoff, Ari" <abiernoff@nmslo.gov>, "Heltman, Elaine G." <eheltman@nmslo.gov>, "David, Deon W."<ddavid@nmslo.gov>, "Elliott, April L." <aelliott@nmslo.gov>, "Graeser, Christopher L." <cgraeser@nmslo.gov>, "Bisbey-Kuehn, Elizabeth A." <ebisbeykuehn@nmslo.gov>

Brittany,

Your denial of Closure at the Cambrian Management, Chem State #4 (Incident # nAPP2426161980) has been received, and I have a few questions/clarifications (provided below in red):

- Based on information provided on the scaled Figure 2, Soil Sample Analytical Results Map the excavation measured approximately 1,050 square feet. The C-141 indicates that the square footage of the area remediated was 500 square feet. **The square footage reported on the C-141 was correct. The final excavation measured 20' x 25'.**
- Pursuant to 19.15.29.12 D. (1)(c) NMAC, Alternately, without division approval, the responsible party may elect to perform a composite and grab sample plan of the remediated area where each composite sample is not representative of more than 200 square feet. Based on the information provided on Figure 2, an adequate amount of base samples were not collected as OCD has not approved an alternative composite and grab sample plan for this incident. **Based on the square footage, do additional base samples need to be collected?**
- Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and the OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC. Samples collected on 9/26/2024 were collected at 1230 but the C-141N indicates samples were to be collected starting at 200 AM. Samples collected on 11/4/2024 were collected at 1000 AM but the C-141N indicates samples were to be collected starting at 1130 AM. **Samples collected on 9/26/24 were to be collected at 2:00 PM, but were collected from 12:30 to 1:00 PM. I was in the area collecting samples from Chem State #1, Chem State #3, Chem State #4, and Chem RZ State #8 from 9:00 AM to 3:05 PM. No OCD or SLO personnel visited the sites during that time. Does the sample collected from S-1 at 4.5' bgs on 9/26/24 need to be recollected? Samples collected on 11/4/24 were collected from 11:25 to 11:40 (as will be shown on the revised lab report). Does the sidewall sample S-2 (0-4.5') that was collected on 11/4/24 need to be recollected?**
- Chain of custody for samples collected on 11/4/2024 does not match sample results. Chain of Custody indicates that it is for the Chem State #1. **The incorrect chain of custody for these samples was included in the lab report. The report will be revised by Eurofins to include the accurate chain of custody.**
- Submit a complete and accurate report through the OCD permitting website by 4/30/2025. **Based on the information provided in this email, please let me know if additional samples need to be collected prior to submitting a revised report to the OCD permitting website. If samples do not need to be collected, would it be possible to add the revised laboratory report for samples collected on 11/4/24 to the portal without submitting an entirely new report?**

I appreciate your assistance! I would just like to be clear on OCD expectations prior to submitting a complete and accurate report (or additional information).

Thank you,
Cindy Crain

[Quoted text hidden]

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

Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>

Mon, Feb 17, 2025 at 10:19 AM

To: Cindy Crain <cindy.crain@gmail.com>

Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, Chris Gaddy <chris.gaddy@octane-energy.com>, "Biernoff, Ari" <abiernoff@nmslo.gov>, "Heltman, Elaine G." <eheltman@nmslo.gov>, "David, Deon W." <ddavid@nmslo.gov>, "Elliott, April L." <aelliott@slo.state.nm.us>, "Graeser, Christopher L." <cgraeser@nmslo.gov>, "Bisbey-Kuehn, Elizabeth A." <ebisbeykuehn@nmslo.gov>, "Smith, Cory, EMNRD" <cory.smith@emnrd.nm.gov>

Cindy,

Please see my responses below in green.

- Based on information provided on the scaled Figure 2, Soil Sample Analytical Results Map the excavation measured approximately 1,050 square feet. The C-141 indicates that the square footage of the area remediated was 500 square feet. **The square footage reported on the C-141 was correct. The final excavation measured 20' x 25'.**

Pursuant to 19.15.29.12 E.(1)(a) NMAC, the remediation closure report must include a scaled site and sampling diagram. The dimensions on the included Figure 2, *Soil Sample Analytical Results Map* show

that the excavation measured approximately 35' by 30'. It is the operator's responsibility to ensure that the maps are drawn to scale. The information provided on the map must be to scale and match what is provided in the report and on the C-141.

- Pursuant to 19.15.29.12 D. (1)(c) NMAC, Alternately, without division approval, the responsible party may elect to perform a composite and grab sample plan of the remediated area where each composite sample is not representative of more than 200 square feet. Based on the information provided on Figure 2, an adequate amount of base samples were not collected as OCD has not approved an alternative composite and grab sample plan for this incident. **Based on the square footage, do additional base samples need to be collected?**

Pursuant to 19.15.29.12 D. (1)(c) NMAC, Alternately, without division approval, the responsible party may elect to perform a composite and grab sample plan of the remediated area where each composite sample is not representative of more than 200 square feet. As stated in your response to the first bullet point, the excavation measure 20'x25' = 500 square feet. At least 2 base samples from the excavation should have been collected.

- Operator failed to provide proper Sampling Notification pursuant to 19.15.29.12.D.(1).(a) NMAC. Failure to provide proper sampling notice is a compliance issue and the OCD may pursue compliance actions pursuant to 19.15.5 NMAC. Operator shall ensure future compliance with 19.15.29.12.D.(1).(a) NMAC. Samples collected on 9/26/2024 were collected at 1230 but the C-141N indicates samples were to be collected starting at 200 AM. Samples collected on 11/4/2024 were collected at 1000 AM but the C-141N indicates samples were to be collected starting at 1130 AM. **Samples collected on 9/26/24 were to be collected at 2:00 PM, but were collected from 12:30 to 1:00 PM. I was in the area collecting samples from Chem State #1, Chem State #3, Chem State #4, and Chem RZ State #8 from 9:00 AM to 3:05 PM. No OCD or SLO personnel visited the sites during that time. Does the sample collected from S-1 at 4.5' bgs on 9/26/24 need to be recollected? Samples collected on 11/4/24 were collected from 11:25 to 11:40 (as will be shown on the revised lab report). Does the sidewall sample S-2 (0-4.5') that was collected on 11/4/24 need to be recollected?**

Regardless of whether an OCD representative shows up to witness sampling, a complete and accurate C-141N (sampling notification) must be submitted. The C-141N functions to give the OCD an opportunity to witness sampling. If changes are to be made to the sampling dates and time that are reported on the C-141N, a variance request from this portion of the rule should be submitted prior to those changes. You may request a variance to use any samples that were collected outside of the dates and times specified on the C-141N but be advised that the variance request must be made in accordance with 19.15.29.14 A. (1) and (2) NMAC, which states "A responsible party may file a written request for a variance from any requirement of 19.15.29 NMAC with the appropriate division district office. The variance request must include: (1) a detailed statement explaining the need for a variance; and (2) a detailed written demonstration that the variance will provide equal or better protection of fresh water, public health and the environment."

- Chain of custody for samples collected on 11/4/2024 does not match sample results. Chain of Custody indicates that it is for the Chem State #1. **The incorrect chain of custody for these samples was included in the lab report. The report will be revised by Eurofins to include the accurate chain of custody.**

Include the corrected laboratory report(s) in the next submittal.

- Submit a complete and accurate report through the OCD permitting website by 4/30/2025. **Based on the information provided in this email, please let me know if additional samples need to be collected prior to submitting a revised report to the OCD permitting website. If samples do not need to be collected, would it be possible to add the revised laboratory report for samples collected on 11/4/24 to the portal without submitting an entirely new report?**

See the information above.

Please let me know if you have any questions or require any additional information.

Thank you,

Brittany Hall • Environmental Specialist

Environmental Bureau Projects Group

EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87110

505.517.5333 | Brittany.Hall@emnrd.nm.gov

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

Effective 12/1/2024: OCD has updated guidance on karst potential occurrence zones. This notice can be found at: <https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/> under "2024 OCD ANNOUNCEMENTS AND NOTIFICATIONS".

The Digital C-141 guidance documents can be found at <https://www.emnrd.nm.gov/ocd/ocd-announcements-and-notifications/> or <https://www.emnrd.nm.gov/ocd/ocd-forms/>.

From: Cindy Crain <cindy.crain@gmail.com>

Sent: Sunday, February 16, 2025 1:17 PM

To: Hall, Brittany, EMNRD <Brittany.Hall@emnrd.nm.gov>

Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Chris Gaddy <chris.gaddy@octane-energy.com>; Biernoff, Ari <abiernoff@nmslo.gov>; Heltman, Elaine G. <eheltman@nmslo.gov>; David, Deon W. <ddavid@nmslo.gov>; Elliott, April L. <aelliott@slo.state.nm.us>; Graeser, Christopher L. <cgraeser@nmslo.gov>; Bisbey-Kuehn, Elizabeth A. <ebisbeykuehn@nmslo.gov>

Subject: [EXTERNAL] Fwd: The Oil Conservation Division (OCD) has rejected the application, Application ID: 423980

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, Feb 17, 2025 at 11:06 AM

To: "Hall, Brittany, EMNRD" <Brittany.Hall@emnrd.nm.gov>

Cc: "Bratcher, Michael, EMNRD" <mike.bratcher@emnrd.nm.gov>, Chris Gaddy <chris.gaddy@octane-energy.com>, "Biernoff, Ari" <abiernoff@nmslo.gov>, "Heltman, Elaine G." <eheltman@nmslo.gov>, "David, Deon W." <ddavid@nmslo.gov>, "Elliott, April L." <aelliott@slo.state.nm.us>, "Graeser, Christopher L." <cgraeser@nmslo.gov>, "Bisbey-Kuehn, Elizabeth A." <ebisbeykuehn@nmslo.gov>, "Smith, Cory, EMNRD" <cory.smith@emnrd.nm.gov>

Thank you, Brittany -

Following sampling notifications to the OCD and SLO, samples will be collected soon and a revised report will be submitted to the OCD portal and the SLO before 4/30/25.

I appreciate you taking the time to get back with me!

Cindy Crain

[Quoted text hidden]



Appendix B: Water Well Files



PLUGGING RECORD



NOTE: A Well Plugging Plan of Operations shall be approved by the State Engineer prior to plugging - 19.27.4 NMAC

I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: L-15570-POD1

Well owner: Tetra Tech on behalf of ConocoPhillips

Phone No.: 713-806-6871

Mailing address: 901 W Wall St Suite 100

City: Midland State: TX Zip code: 79701

II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: John Scarborough Drilling Inc
- 2) New Mexico Well Driller License No.: WD-1188 Expiration Date: 03/31/2024
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Lane Scarborough
- 4) Date well plugging began: 10/11/2023 Date well plugging concluded: 10/11/2023
- 5) GPS Well Location: Latitude: 33 deg, 02 min, 38.09 sec
Longitude: 103 deg, 42 min, 26.94 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 107 ft below ground level (bgl),
by the following manner: Cement-bentonite slurry (max 5.2 gallons water per 94-lb sack of Type I/II Portland cement)
- 7) Static water level measured at initiation of plugging: DRY ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 09/07/2023
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

OCD OCT NOV 3 2023 PM 1:25

- 10) Log of Plugging Activities - Label vertical scale with depths, and indicate separate plugging intervals with horizontal lines as necessary to illustrate material or methodology changes. Attach additional pages if necessary.

For each interval plugged, describe within the following columns:

Depth (ft bgl)	Plugging Material Used (include any additives used)	Volume of Material Placed (gallons)	Theoretical Volume of Borehole/ Casing (gallons)	Placement Method (tremie pipe, other)	Comments ("casing perforated first", "open annular space also plugged", etc.)
107 feet - 2 feet below ground surface: Cement-bentonite slurry (bentonite powder) was mixed using a maximum of 5.2 gallons water per 94-lb sack of Type I/II Portland cement.		17.1 gallons of cement-bentonite slurry based on 2 inch inside diameter hole from 2 feet to 107 feet below the ground surface	17.4 gallons theoretically based on 2 inch inside diameter hole to 107 feet below the ground surface	Filled from the bottom upwards to 2 feet below the ground surface using a tremie pipe. The sealant material (cement-bent onite slurry) was pumped through the tremie pipe extended to near well bottom and kept below the top of the slurry column as the well is plugged from bottom-upwar ds, while the slurry displaces the standing water column upwards from below.	
2 feet to 0 feet below ground surface: soils and pad material collected during drilling of the temporary well					

MULTIPLY	BY	AND OBTAIN
cubic feet x 7.4805	=	gallons
cubic yards x 201.97	=	gallons

USE DTT NOV 3 2023 PM 1:25

III. SIGNATURE:

I, Lane Scarborough, say that I am familiar with the rules of the Office of the State Engineer pertaining to the plugging of wells and that each and all of the statements in this Plugging Record and attachments are true to the best of my knowledge and belief.

Lane Scarborough
Signature of Well Driller


10/31/23

Date

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	Tw	Rng	X	Y	Map
NA	L 15570 POD1	SE	NE	SW	03	15S	32E	620685.9	3656897.6	

* UTM location was derived from PLSS - see Help

Driller License:	1188	Driller Company:	SCARBOROUGH DRILLING INC.
Driller Name:	SCARBOROUGH, LANEIRE, RODNEY		
Drill Start Date:	Drill Finish Date:	Plug Date:	2023-10-11
Log File Date:	PCW Rcv Date:	Source:	
Pump Type:	Pipe Discharge Size:	Estimated Yield:	
Casing Size:	Depth Well:	Depth Water:	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Water Right Summary


[get image](#)
[list](#)

WR File Number: L 15570

Subbasin: L Cross Reference:

Primary Purpose: MON MONITORING WELL

Primary Status: PMT Permit

Total Acres:

Subfile: Header:

Total Diversion: 0.000

Cause/Case:

Owner: TETRA TECH O/B/O CONOCO PHILLIPS COMPANY Owner Class: User

Contact: CHRISTIAN LLULL

Documents on File

(acre-feet per annum)

Transaction
Images

Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
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750812	EXPL	2023-09-07	PMT	APR	L-15570 POD1	T	0.000	0.000	
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Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map	Other Location	Desc
L 15570 POD1	NA		SE	NE	SW	03	15S	32E	620685.9	3656897.6		CHEM STATE 5_DTW	

* UTM location was derived from PLSS - see Help

Source

Acres	Diversion	CU	Use	Priority	Source	Description
0.000	0.000		MON		GW	

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

WR-46

**APPLICATION TO APPROPRIATE UNDERGROUND WATERS
IN ACCORDANCE WITH SECTION 75-11-1 NEW MEXICO STATUTES
(Three Acre Feet Per Annum)**

509113

1. Name and Address of Applicant:

File No. L-6654Sams & Dean Cattle Co.Box 845Lovington, N. M.38154
1

2. Describe well location under one of the following subheadings:

a. 1/4 NE 1/4 NE 1/4 of Sec. 4 Twp. 15 S. Rge. 32 E. N. M. P. M., in
Lea County.

b. Tract No. _____ of Map No. _____ of the _____ District.

c. Lot No. _____ of Block No. _____ of the _____ Subdivision, of record in
_____ County.d. (Describe location by direction and distance from known land marks.)

3. Give street address or route and box No. of property upon which well is to be located, if possible: _____

4. Name of driller, if known: Complete5. Approximate depth of well (if known) 200 feet; outside diameter of casing 7 inches.

6. Use of water (check appropriate box or boxes):

☐ Household, trees, lawn and non-commercial garden not to exceed 1 acre.☒ Livestock watering.☐ Drinking and sanitary purposes or the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.☐ Prospecting, mining or drilling operations to discover or develop natural resources.☐ Construction of public works, highways and roads.

If any of the last three were marked, give name and nature of business under Remarks. (Item 7)

7. Remarks: To use an existing well for livestock watering purposes.

_____I, Bob Dean affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.Bob Dean, ApplicantBy: Bob DeanDate: 3/10/70

GENERAL CONDITIONS OF APPROVAL

- A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any period of one year.
- B. Well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 75-11-13 New Mexico Statutes. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 75-11-13).
- C. Driller's log must be filed in office of the State Engineer within 10 days after well is drilled or driven. Failure to file log within that time shall result in automatic cancellation of the permit. Upon request of the permittee, log forms will be provided by the State Engineer.
- D. Diameter of casing limited to 7 inch outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- E. Any use of water from the well other than as indicated shall automatically cancel this permit unless prior approval is obtained from the State Engineer.

SPECIFIC CONDITIONS OF APPROVAL (Applicable only when so indicated on the other side of this form)

1. Depth of well in no event to exceed the thickness of the valley fill or Ogallala formation.
2. Well to be constructed to artesian well specifications and State Engineer Office to be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit limited for a definite period of not to exceed one year from the date of approval.
4. Limited to household, trees, lawn and non-commercial garden not to exceed one acre and/or stock use.
5. A totalizing meter approved by the State Engineer shall be installed on the discharge line before the first branch line prior to the appropriation of water and pumping records shall be submitted to the District Supervisor (a) for each calendar month, on or before the 30th day of the following month (b) on the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year.
6. Well to be plugged upon completion of permitted use and plugging report filed within 10 days.
7. Final approval for the use of said well dependent upon a leakage test to be made by the State Engineer Office.

GENERAL INSTRUCTIONS

Application shall be executed in triplicate and forwarded with a \$1.00 filing fee to the appropriate office of the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well to be retained for uses as indicated, an explanation (and file number, if possible) should be given under Remarks. (Item 7).

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the office indicated:

Rio Grande, Bluewater and Estancia Basins
District No. 1, 505 Marquette, N. W., Rm 1023, Albuquerque, New Mexico

Roswell, Lea, Portales, Carlsbad, Hondo, Penasco and Jal Basins
District No. 2, Box 1717, Roswell, New Mexico

Mimbres, Hot Springs, Virden Valley, Animas, Playas, Gila-San Francisco, San Simon, Lordsburg and Nutt-Hockett Basins
District No. 3, Box 844, Deming, New Mexico


8. Appropriation limited to a maximum of 3 acre feet per annum, or the amount reasonably required for the purpose specified, whichever is the lesser.

9. Total appropriation over and above irrigation rights shall in no event exceed 3 acre feet per annum from any one well.

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 06654		NE	NE	04	15S	32E	619849.0	3657710.0 *	

* UTM location was derived from PLSS - see Help

Driller License:	Driller Company:	
Driller Name:		
Drill Start Date:	Drill Finish Date:	Plug Date:
Log File Date:	PCW Rcv Date:	Source:
Pump Type:	Pipe Discharge Size:	Estimated Yield:
Casing Size:	Depth Well:	Depth Water:

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



New Mexico Office of the State Engineer

Water Right Summary

[get image list](#)**WR File Number:** L 06654**Subbasin:** L**Cross Reference:****Primary Purpose:** STK 72-12-1 LIVESTOCK WATERING**Primary Status:** PMT Permit**Total Acres:****Subfile:****Header:****Total Diversion:** 3.000**Cause/Case:****Owner:** SAMS & DEAN CATTLE COMPANY**Owner Class:** Owner

Documents on File

(acre-feet per annum)

Transaction Images	Trn #	Doc	File/Act	Status 1	Status 2	Transaction Desc.	From/To	Acres	Diversion	Consumptive
	509113	72121	1970-03-13	PMT	APR	L 06654	T		3.000	

Current Points of Diversion

POD Number	Well Tag	Source	Q64	Q16	Q4	Sec	Tw	Rng	X	Y	Map	Other Location Desc
L 06654			NE	NE	04	15S	32E	619849.0	3657710.0	*		

* UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.



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site_no list =

- 330223103432501

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

USGS 330223103432501 15S.32E.04.344222

Lea County, New Mexico
Latitude 33°02'25", Longitude 103°43'21" NAD27
Land-surface elevation 4,310.30 feet above NGVD29
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
1970-04-02			D	62610	4117.79	NGVD29	1		Z	
1970-04-02			D	62611	4119.51	NAVD88	1		Z	
1970-04-02			D	72019	192.51		1		Z	
1971-09-03			D	62610	4117.88	NGVD29	1		Z	
1971-09-03			D	62611	4119.60	NAVD88	1		Z	
1971-09-03			D	72019	192.42		1		Z	
1976-03-29			D	62610	4117.96	NGVD29	1		Z	
1976-03-29			D	62611	4119.68	NAVD88	1		Z	
1976-03-29			D	72019	192.34		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

Section	Code	Description
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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Available data for this site

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GO

Well Site

DESCRIPTION:

Latitude 33°02'25", Longitude 103°43'21" NAD27
Lea County, New Mexico , Hydrologic Unit 12080003
Well depth: not determined.
Land surface altitude: 4,310.30 feet above NGVD29.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1970-04-02	1976-03-29	3
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
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site_no list =

- 330225103432502

Minimum number of levels = 1

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USGS 330225103432502 15S.32E.04.34242A

Lea County, New Mexico

Latitude 33°02'28", Longitude 103°43'21" NAD27

Land-surface elevation 4,311.10 feet above NGVD29

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 (measured)
1966-03-29			D	62610	4118.20	NGVD29	1	Z		
1966-03-29			D	62611	4119.92	NAVD88	1	Z		
1966-03-29			D	72019	192.90		1	Z		
1970-04-03			D	62610	4118.54	NGVD29	1	Z		
1970-04-03			D	62611	4120.26	NAVD88	1	Z		
1970-04-03			D	72019	192.56		1	Z		
1971-03-31			D	62610	4118.70	NGVD29	1	Z		
1971-03-31			D	62611	4120.42	NAVD88	1	Z		
1971-03-31			D	72019	192.40		1	Z		
1976-03-29			D	62610	4118.58	NGVD29	1	Z		
1976-03-29			D	62611	4120.30	NAVD88	1	Z		
1976-03-29			D	72019	192.52		1	Z		
1981-01-27			D	62610	4118.46	NGVD29	1	Z		
1981-01-27			D	62611	4120.18	NAVD88	1	Z		
1981-01-27			D	72019	192.64		1	Z		
1986-01-10			D	62610	4119.06	NGVD29	1	Z		
1986-01-10			D	62611	4120.78	NAVD88	1	Z		
1986-01-10			D	72019	192.04		1	Z		

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
1990-12-06			D	62610	4118.98	NGVD29	1		Z	
1990-12-06			D	62611	4120.70	NAVD88	1		Z	
1990-12-06			D	72019	192.12		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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USGS 330225103432502 15S.32E.04.34242A

Available data for this site

SUMMARY OF ALL AVAILABLE DATA ▼

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Well Site

DESCRIPTION:

Latitude 33°02'28", Longitude 103°43'21" NAD27
Lea County, New Mexico , Hydrologic Unit 12080003
Well depth: not determined.
Land surface altitude: 4,311.10 feet above NGVD29.
Well completed in "High Plains aquifer" (N100HGHPLN) national aquifer.
Well completed in "Ogallala Formation" (121OGLL) local aquifer

AVAILABLE DATA:

Data Type	Begin Date	End Date	Count
Field groundwater-level measurements	1966-03-29	1990-12-06	7
Revisions	Unavailable (site:0) (timeseries:0)		

OPERATION:

Record for this site is maintained by the USGS New Mexico Water Science Center
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Appendix C: Laboratory Reports and Chain-of-Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Cindy Crain
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761
Generated 3/29/2024 9:48:38 AM

JOB DESCRIPTION

Chem State #4
Lea Co., NM

JOB NUMBER

880-40929-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

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

Client: Crain Environmental
Project/Site: Chem State #4

Laboratory Job ID: 880-40929-1
SDG: Lea Co., NM

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., 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
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.

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)

Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TNTC	Too Numerous To Count

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
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- 12
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Case Narrative

Client: Crain Environmental
Project: Chem State #4

Job ID: 880-40929-1

Job ID: 880-40929-1

Eurofins Midland

Job Narrative 880-40929-1

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 3/15/2024 2:51 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 3.7°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-1 (1') (880-40929-1), S-1 (4.2) (880-40929-2) and T-1 (1') (880-40929-3).

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: S-1 (1') (880-40929-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-75817 and analytical batch 880-75778 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.

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.

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Client Sample ID: S-1 (1')

Lab Sample ID: 880-40929-1

Date Collected: 03/12/24 16:40

Matrix: Solid

Date Received: 03/15/24 14:51

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		03/18/24 10:31	03/20/24 22:26	1
Toluene	0.00261		0.00202		mg/Kg		03/18/24 10:31	03/20/24 22:26	1
Ethylbenzene	0.0133		0.00202		mg/Kg		03/18/24 10:31	03/20/24 22:26	1
m-Xylene & p-Xylene	0.0472		0.00403		mg/Kg		03/18/24 10:31	03/20/24 22:26	1
o-Xylene	0.145		0.00202		mg/Kg		03/18/24 10:31	03/20/24 22:26	1
Xylenes, Total	0.192		0.00403		mg/Kg		03/18/24 10:31	03/20/24 22:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	161	S1+	70 - 130	03/18/24 10:31	03/20/24 22:26	1
1,4-Difluorobenzene (Surr)	106		70 - 130	03/18/24 10:31	03/20/24 22:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.208		0.00403		mg/Kg			03/20/24 22:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4440		50.0		mg/Kg			03/19/24 03:15	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	166		50.0		mg/Kg		03/18/24 10:16	03/19/24 03:15	1
Diesel Range Organics (Over C10-C28)	4020		50.0		mg/Kg		03/18/24 10:16	03/19/24 03:15	1
Oil Range Organics (Over C28-C36)	258		50.0		mg/Kg		03/18/24 10:16	03/19/24 03:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130	03/18/24 10:16	03/19/24 03:15	1
o-Terphenyl	91		70 - 130	03/18/24 10:16	03/19/24 03:15	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3140		24.9		mg/Kg			03/19/24 14:34	5

Client Sample ID: S-1 ('4.2)

Lab Sample ID: 880-40929-2

Date Collected: 03/12/24 16:45

Matrix: Solid

Date Received: 03/15/24 14:51

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		03/18/24 10:31	03/20/24 22:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 22:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 22:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		03/18/24 10:31	03/20/24 22:46	1
o-Xylene	0.0174		0.00200		mg/Kg		03/18/24 10:31	03/20/24 22:46	1
Xylenes, Total	0.0174		0.00401		mg/Kg		03/18/24 10:31	03/20/24 22:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130	03/18/24 10:31	03/20/24 22:46	1
1,4-Difluorobenzene (Surr)	95		70 - 130	03/18/24 10:31	03/20/24 22:46	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Client Sample ID: S-1 ('4.2)

Lab Sample ID: 880-40929-2

Date Collected: 03/12/24 16:45

Matrix: Solid

Date Received: 03/15/24 14:51

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0174		0.00401		mg/Kg			03/20/24 22:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3000		50.1		mg/Kg			03/19/24 03:36	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	<50.1	U	50.1		mg/Kg		03/18/24 10:16	03/19/24 03:36	1
Diesel Range Organics (Over C10-C28)	2820		50.1		mg/Kg		03/18/24 10:16	03/19/24 03:36	1
Oil Range Organics (Over C28-C36)	182		50.1		mg/Kg		03/18/24 10:16	03/19/24 03:36	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130				03/18/24 10:16	03/19/24 03:36	1
o-Terphenyl	95		70 - 130				03/18/24 10:16	03/19/24 03:36	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2890		24.8		mg/Kg			03/19/24 14:40	5

Client Sample ID: T-1 ('1')

Lab Sample ID: 880-40929-3

Date Collected: 03/12/24 16:50

Matrix: Solid

Date Received: 03/15/24 14:51

Method: EPA 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.1	U	10.1		mg/Kg		03/26/24 17:05	03/28/24 14:12	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		03/24/24 19:38	03/28/24 09:16	1
Exchangeable Sodium Percentage	<0.100	U	0.100		%		03/24/24 19:38	03/28/24 09:16	1

General Chemistry - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH (SW846 9045D)	7.9	HF			SU			03/22/24 13:10	1
Temperature (SW846 9045D)	20.5	HF			Deg. C			03/22/24 13:10	1
Electrical Conductivity (SM 2510B)	1.88		0.0100		ds/m			03/27/24 14:02	1

Eurofins Midland

Surrogate Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
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)
880-40929-1	S-1 (1')	161 S1+	106
880-40929-2	S-1 (4.2)	77	95
LCS 880-75819/1-A	Lab Control Sample	106	118
LCSD 880-75819/2-A	Lab Control Sample Dup	105	117
MB 880-75819/5-A	Method Blank	75	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)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-40929-1	S-1 (1')	100	91
880-40929-2	S-1 (4.2)	96	95
LCS 880-75817/2-A	Lab Control Sample	96	114
LCSD 880-75817/3-A	Lab Control Sample Dup	85	97
MB 880-75817/1-A	Method Blank	137 S1+	160 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-75819/5-A

Matrix: Solid

Analysis Batch: 76130

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75819

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 19:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 19:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 19:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/18/24 10:31	03/20/24 19:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/18/24 10:31	03/20/24 19:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/18/24 10:31	03/20/24 19:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	75		70 - 130	03/18/24 10:31	03/20/24 19:21	1
1,4-Difluorobenzene (Surr)	93		70 - 130	03/18/24 10:31	03/20/24 19:21	1

Lab Sample ID: LCS 880-75819/1-A

Matrix: Solid

Analysis Batch: 76130

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75819

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09232		mg/Kg		92	70 - 130
Toluene	0.100	0.1032		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1090		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2215		mg/Kg		111	70 - 130
o-Xylene	0.100	0.1082		mg/Kg		108	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: LCSD 880-75819/2-A

Matrix: Solid

Analysis Batch: 76130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 75819

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08343		mg/Kg		83	70 - 130	10	35
Toluene	0.100	0.09664		mg/Kg		97	70 - 130	7	35
Ethylbenzene	0.100	0.1091		mg/Kg		109	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2129		mg/Kg		106	70 - 130	4	35
o-Xylene	0.100	0.1035		mg/Kg		104	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	117		70 - 130

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-75817/1-A

Matrix: Solid

Analysis Batch: 75778

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 75817

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		03/18/24 10:16	03/18/24 19:52	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/18/24 10:16	03/18/24 19:52	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/18/24 10:16	03/18/24 19:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	137	S1+	70 - 130				03/18/24 10:16	03/18/24 19:52	1
o-Terphenyl	160	S1+	70 - 130				03/18/24 10:16	03/18/24 19:52	1

Lab Sample ID: LCS 880-75817/2-A

Matrix: Solid

Analysis Batch: 75778

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 75817

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	872.4		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	742.7		mg/Kg		74	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	96		70 - 130				
o-Terphenyl	114		70 - 130				

Lab Sample ID: LCSD 880-75817/3-A

Matrix: Solid

Analysis Batch: 75778

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 75817

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	873.9		mg/Kg		87	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	765.6		mg/Kg		77	70 - 130	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	85		70 - 130						
o-Terphenyl	97		70 - 130						

Method: 300.0 - Anions, Ion Chromatography

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

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

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 860-151711/57-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: MB 880-75923/1-A

Matrix: Solid

Analysis Batch: 75977

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			03/19/24 12:00	1

Lab Sample ID: LCS 880-75923/2-A

Matrix: Solid

Analysis Batch: 75977

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 880-75923/3-A

Matrix: Solid

Analysis Batch: 75977

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	248.7		mg/Kg		99	90 - 110	0	20

Method: SM 2510B - Conductivity, Specific Conductance

Lab Sample ID: MB 860-151898/2

Matrix: Solid

Analysis Batch: 151898

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Electrical Conductivity	<0.0100	U	0.0100		ds/m			03/27/24 14:02	1

Lab Sample ID: 880-40929-3 DU

Matrix: Solid

Analysis Batch: 151898

Client Sample ID: T-1 (1')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Electrical Conductivity	1.88		1.887		ds/m		0.4	20

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

GC VOA

Prep Batch: 75819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	5035	
880-40929-2	S-1 (4.2)	Total/NA	Solid	5035	
MB 880-75819/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-75819/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-75819/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 76130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	8021B	75819
880-40929-2	S-1 (4.2)	Total/NA	Solid	8021B	75819
MB 880-75819/5-A	Method Blank	Total/NA	Solid	8021B	75819
LCS 880-75819/1-A	Lab Control Sample	Total/NA	Solid	8021B	75819
LCSD 880-75819/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	75819

Analysis Batch: 76235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	Total BTEX	
880-40929-2	S-1 (4.2)	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 75778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	8015B NM	75817
880-40929-2	S-1 (4.2)	Total/NA	Solid	8015B NM	75817
MB 880-75817/1-A	Method Blank	Total/NA	Solid	8015B NM	75817
LCS 880-75817/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	75817
LCSD 880-75817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	75817

Prep Batch: 75817

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	8015NM Prep	
880-40929-2	S-1 (4.2)	Total/NA	Solid	8015NM Prep	
MB 880-75817/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-75817/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-75817/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 76015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Total/NA	Solid	8015 NM	
880-40929-2	S-1 (4.2)	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 75923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Soluble	Solid	DI Leach	
880-40929-2	S-1 (4.2)	Soluble	Solid	DI Leach	
MB 880-75923/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-75923/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-75923/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

HPLC/IC

Analysis Batch: 75977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-1	S-1 (1')	Soluble	Solid	300.0	75923
880-40929-2	S-1 (4.2)	Soluble	Solid	300.0	75923
MB 880-75923/1-A	Method Blank	Soluble	Solid	300.0	75923
LCS 880-75923/2-A	Lab Control Sample	Soluble	Solid	300.0	75923
LCSD 880-75923/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	75923

Prep Batch: 151711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Total/NA	Solid	300_Prep	
MB 860-151711/55-A	Method Blank	Total/NA	Solid	300_Prep	
LCS 860-151711/56-A	Lab Control Sample	Total/NA	Solid	300_Prep	
LCSD 860-151711/57-A	Lab Control Sample Dup	Total/NA	Solid	300_Prep	

Analysis Batch: 151762

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Total/NA	Solid	300.0	151711
MB 860-151711/55-A	Method Blank	Total/NA	Solid	300.0	151711
LCS 860-151711/56-A	Lab Control Sample	Total/NA	Solid	300.0	151711
LCSD 860-151711/57-A	Lab Control Sample Dup	Total/NA	Solid	300.0	151711

Metals

Prep Batch: 151356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Total/NA	Solid	29B	

Prep Batch: 151856

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Total/NA	Solid	29B	151356

Analysis Batch: 152058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Total/NA	Solid	29B SAR	151856

General Chemistry

Leach Batch: 151109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Soluble	Solid	DI Leach	

Analysis Batch: 151150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Soluble	Solid	9045D	151109

Leach Batch: 151802

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Soluble	Solid	DI Leach	
880-40929-3 DU	T-1 (1')	Soluble	Solid	DI Leach	

Analysis Batch: 151898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-40929-3	T-1 (1')	Soluble	Solid	SM 2510B	151802

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

General Chemistry (Continued)

Analysis Batch: 151898 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 860-151898/2	Method Blank	Total/NA	Solid	SM 2510B	151802
LCS 860-151898/3	Lab Control Sample	Total/NA	Solid	SM 2510B	
LCSD 860-151898/4	Lab Control Sample Dup	Total/NA	Solid	SM 2510B	
880-40929-3 DU	T-1 (1')	Soluble	Solid	SM 2510B	

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Client Sample ID: S-1 (1')

Lab Sample ID: 880-40929-1

Date Collected: 03/12/24 16:40

Matrix: Solid

Date Received: 03/15/24 14:51

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	75819	03/18/24 10:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	76130	03/20/24 22:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76235	03/20/24 22:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			76015	03/19/24 03:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	75817	03/18/24 10:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75778	03/19/24 03:15	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	75923	03/18/24 15:32	SA	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	75977	03/19/24 14:34	CH	EET MID

Client Sample ID: S-1 (4.2)

Lab Sample ID: 880-40929-2

Date Collected: 03/12/24 16:45

Matrix: Solid

Date Received: 03/15/24 14:51

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	75819	03/18/24 10:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	76130	03/20/24 22:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			76235	03/20/24 22:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			76015	03/19/24 03:36	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	75817	03/18/24 10:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	75778	03/19/24 03:36	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	75923	03/18/24 15:32	SA	EET MID
Soluble	Analysis	300.0		5	10 mL	10 mL	75977	03/19/24 14:40	CH	EET MID

Client Sample ID: T-1 (1')

Lab Sample ID: 880-40929-3

Date Collected: 03/12/24 16:50

Matrix: Solid

Date Received: 03/15/24 14:51

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			4.97 g	50 mL	151711	03/26/24 17:05	HN	EET HOU
Total/NA	Analysis	300.0		1			151762	03/28/24 14:12	RBNS	EET HOU
Total/NA	Prep	29B			45 g	40 g	151356	03/24/24 19:38	AGR	EET HOU
Total/NA	Prep	29B			30.51 g	30 mL	151856	03/27/24 10:35	AGR	EET HOU
Total/NA	Analysis	29B SAR		1			152058	03/28/24 09:16	JDM	EET HOU
Soluble	Leach	DI Leach			20 g	20 mL	151109	03/22/24 10:06	BW	EET HOU
Soluble	Analysis	9045D		1	20 g	20 mL	151150	03/22/24 13:10	BW	EET HOU
Soluble	Leach	DI Leach			30 g	30 mL	151802	03/27/24 08:23	BW	EET HOU
Soluble	Analysis	SM 2510B		1			151898	03/27/24 14:02	BW	EET HOU

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

Eurofins Midland

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-40929-1
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	T104704400-23-26	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: Chem State #4

Job ID: 880-40929-1
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 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 Louisiana
- 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: Chem State #4

Job ID: 880-40929-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-40929-1	S-1 (1')	Solid	03/12/24 16:40	03/15/24 14:51
880-40929-2	S-1 ('4.2)	Solid	03/12/24 16:45	03/15/24 14:51
880-40929-3	T-1 (1')	Solid	03/12/24 16:50	03/15/24 14:51

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Eurofins Midland

1211 W Florida Ave
Midland, TX 79701
Phone: 432-704-5440

Chain of Custody Record



Environment Testing

[illegible]

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-40929-1

SDG Number: Lea Co., NM

Login Number: 40929

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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	

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-40929-1

SDG Number: Lea Co., NM

Login Number: 40929

List Source: Eurofins Houston

List Number: 2

List Creation: 03/16/24 11:42 AM

Creator: Baker, Jeremiah

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Cindy Crain
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761
Generated 10/2/2024 4:48:37 PM

JOB DESCRIPTION

Chem State #4
Lea Co., NM

JOB NUMBER

880-49104-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

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
10/2/2024 4:48:37 PM

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

Client: Crain Environmental
Project/Site: Chem State #4

Laboratory Job ID: 880-49104-1
SDG: Lea Co., NM

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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.
α	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: Chem State #4

Job ID: 880-49104-1

Job ID: 880-49104-1

Eurofins Midland

Job Narrative 880-49104-1

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.

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-92118 and analytical batch 880-92214 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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 surrogate recovery for the blank associated with preparation batch 880-91963 and analytical batch 880-92182 was outside the control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-91963/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-92182 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 880-92182/48).

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-92041 and analytical batch 880-92279 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.

HPLC/IC

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

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Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: S-1 (4.5')

Lab Sample ID: 880-49104-1

Date Collected: 09/26/24 12:30

Matrix: Solid

Date Received: 09/27/24 13:45

Sample Depth: 4.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201		mg/Kg		09/30/24 11:06	10/01/24 13:29	1
Toluene	<0.00201	U F1	0.00201		mg/Kg		09/30/24 11:06	10/01/24 13:29	1
Ethylbenzene	<0.00201	U F1	0.00201		mg/Kg		09/30/24 11:06	10/01/24 13:29	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402		mg/Kg		09/30/24 11:06	10/01/24 13:29	1
o-Xylene	<0.00201	U F1	0.00201		mg/Kg		09/30/24 11:06	10/01/24 13:29	1
Xylenes, Total	<0.00402	U F1	0.00402		mg/Kg		09/30/24 11:06	10/01/24 13:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	09/30/24 11:06	10/01/24 13:29	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/30/24 11:06	10/01/24 13:29	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 13:29	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			10/01/24 05:18	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		09/27/24 15:27	10/01/24 05:18	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/27/24 15:27	10/01/24 05:18	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/27/24 15:27	10/01/24 05:18	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130	09/27/24 15:27	10/01/24 05:18	1
o-Terphenyl	85		70 - 130	09/27/24 15:27	10/01/24 05:18	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7790		49.7		mg/Kg			10/01/24 18:50	10

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

Lab Sample ID: 880-49104-2

Date Collected: 09/26/24 12:35

Matrix: Solid

Date Received: 09/27/24 13:45

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		09/30/24 11:06	10/01/24 13:49	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:49	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/24 11:06	10/01/24 13:49	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:49	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/24 11:06	10/01/24 13:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/30/24 11:06	10/01/24 13:49	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-49104-2

Date Collected: 09/26/24 12:35

Matrix: Solid

Date Received: 09/27/24 13:45

Sample Depth: 0-4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	09/30/24 11:06	10/01/24 13:49	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			10/01/24 13:49	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			10/01/24 05:32	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	<49.7	U	49.7		mg/Kg		09/27/24 15:27	10/01/24 05:32	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		09/27/24 15:27	10/01/24 05:32	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		09/27/24 15:27	10/01/24 05:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				09/27/24 15:27	10/01/24 05:32	1
o-Terphenyl	87		70 - 130				09/27/24 15:27	10/01/24 05:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3710		24.8		mg/Kg			10/01/24 18:56	5

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

Lab Sample ID: 880-49104-3

Date Collected: 09/26/24 12:40

Matrix: Solid

Date Received: 09/27/24 13:45

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		09/30/24 11:06	10/01/24 14:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		09/30/24 11:06	10/01/24 14:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		09/30/24 11:06	10/01/24 14:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		09/30/24 11:06	10/01/24 14:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		09/30/24 11:06	10/01/24 14:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		09/30/24 11:06	10/01/24 14:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	09/30/24 11:06	10/01/24 14:10	1
1,4-Difluorobenzene (Surr)	102		70 - 130	09/30/24 11:06	10/01/24 14:10	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 14:10	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			10/01/24 05:47	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-49104-3

Date Collected: 09/26/24 12:40

Matrix: Solid

Date Received: 09/27/24 13:45

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		09/27/24 15:27	10/01/24 05:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/27/24 15:27	10/01/24 05:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/27/24 15:27	10/01/24 05:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				09/27/24 15:27	10/01/24 05:47	1
o-Terphenyl	83		70 - 130				09/27/24 15:27	10/01/24 05:47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	825		25.3		mg/Kg			10/01/24 19:01	5

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

Lab Sample ID: 880-49104-4

Date Collected: 09/26/24 12:45

Matrix: Solid

Date Received: 09/27/24 13:45

Sample Depth: 0-4'

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 11:06	10/01/24 14:30	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 14:30	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 14:30	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 14:30	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 14:30	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 14:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130				09/30/24 11:06	10/01/24 14:30	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/30/24 11:06	10/01/24 14:30	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 14:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	112		49.9		mg/Kg			10/01/24 06:01	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	<49.9	U	49.9		mg/Kg		09/27/24 15:27	10/01/24 06:01	1
Diesel Range Organics (Over C10-C28)	112		49.9		mg/Kg		09/27/24 15:27	10/01/24 06:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/27/24 15:27	10/01/24 06:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130				09/27/24 15:27	10/01/24 06:01	1
o-Terphenyl	84		70 - 130				09/27/24 15:27	10/01/24 06:01	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-49104-4

Date Collected: 09/26/24 12:45

Matrix: Solid

Date Received: 09/27/24 13:45

Sample Depth: 0-4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1120		25.1		mg/Kg			10/01/24 19:06	5

Client Sample ID: S-5 (0-4')

Lab Sample ID: 880-49104-5

Date Collected: 09/26/24 12:50

Matrix: Solid

Date Received: 09/27/24 13:45

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		09/30/24 11:06	10/01/24 14:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 14:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 14:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		09/30/24 11:06	10/01/24 14:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 14:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		09/30/24 11:06	10/01/24 14:51	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130				09/30/24 11:06	10/01/24 14:51	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/30/24 11:06	10/01/24 14:51	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 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/01/24 06:16	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	<49.8	U	49.8		mg/Kg		09/27/24 15:27	10/01/24 06:16	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/27/24 15:27	10/01/24 06:16	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/27/24 15:27	10/01/24 06:16	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130				09/27/24 15:27	10/01/24 06:16	1
o-Terphenyl	85		70 - 130				09/27/24 15:27	10/01/24 06:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2240		25.0		mg/Kg			10/01/24 19:12	5

Client Sample ID: Stockpile 1

Lab Sample ID: 880-49104-6

Date Collected: 09/26/24 12:55

Matrix: Solid

Date Received: 09/27/24 13:45

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 11:06	10/01/24 15:11	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: Stockpile 1

Lab Sample ID: 880-49104-6

Date Collected: 09/26/24 12:55

Matrix: Solid

Date Received: 09/27/24 13:45

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:11	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:11	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 15:11	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:11	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 15:11	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				09/30/24 11:06	10/01/24 15:11	1
1,4-Difluorobenzene (Surr)	103		70 - 130				09/30/24 11:06	10/01/24 15:11	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 15:11	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	49.9		mg/Kg		09/29/24 20:31	10/01/24 22:27	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/29/24 20:31	10/01/24 22:27	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/29/24 20:31	10/01/24 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130				09/29/24 20:31	10/01/24 22:27	1
o-Terphenyl	99		70 - 130				09/29/24 20:31	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	28.6		5.01		mg/Kg			10/02/24 08:34	1

Client Sample ID: Stockpile 2

Lab Sample ID: 880-49104-7

Date Collected: 09/26/24 13:00

Matrix: Solid

Date Received: 09/27/24 13:45

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 11:06	10/01/24 15:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 15:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		09/30/24 11:06	10/01/24 15:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		09/30/24 11:06	10/01/24 15:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130				09/30/24 11:06	10/01/24 15:32	1
1,4-Difluorobenzene (Surr)	104		70 - 130				09/30/24 11:06	10/01/24 15:32	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: Stockpile 2

Lab Sample ID: 880-49104-7

Date Collected: 09/26/24 13:00

Matrix: Solid

Date Received: 09/27/24 13:45

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 15:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/01/24 23:12	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 20:31	10/01/24 23:12	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/29/24 20:31	10/01/24 23:12	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/29/24 20:31	10/01/24 23:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	100		70 - 130				09/29/24 20:31	10/01/24 23:12	1
o-Terphenyl	98		70 - 130				09/29/24 20:31	10/01/24 23:12	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.6		4.97		mg/Kg			10/01/24 19:18	1

Surrogate Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
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)
880-49104-1	S-1 (4.5')	117	102
880-49104-1 MS	S-1 (4.5')	101	102
880-49104-1 MSD	S-1 (4.5')	106	101
880-49104-2	S-2 (0-4')	103	104
880-49104-3	S-3 (0-4')	113	102
880-49104-4	S-4 (0-4')	107	103
880-49104-5	S-5 (0-4')	105	104
880-49104-6	Stockpile 1	106	103
880-49104-7	Stockpile 2	108	104
LCS 880-92118/1-A	Lab Control Sample	105	100
LCSD 880-92118/2-A	Lab Control Sample Dup	101	103
MB 880-92118/5-A	Method Blank	103	99
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)
880-49104-1	S-1 (4.5')	78	85
880-49104-2	S-2 (0-4')	81	87
880-49104-3	S-3 (0-4')	77	83
880-49104-4	S-4 (0-4')	77	84
880-49104-5	S-5 (0-4')	80	85
880-49104-6	Stockpile 1	102	99
880-49104-6 MS	Stockpile 1	105	95
880-49104-6 MSD	Stockpile 1	109	98
880-49104-7	Stockpile 2	100	98
LCS 880-91963/2-A	Lab Control Sample	117	113
LCS 880-92041/2-A	Lab Control Sample	112	110
LCSD 880-91963/3-A	Lab Control Sample Dup	133 S1+	130
LCSD 880-92041/3-A	Lab Control Sample Dup	126	127
MB 880-91963/1-A	Method Blank	65 S1-	71
MB 880-92041/1-A	Method Blank	145 S1+	143 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-92118/5-A

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 92118

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:07	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:07	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:07	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/30/24 11:06	10/01/24 13:07	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/30/24 11:06	10/01/24 13:07	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/30/24 11:06	10/01/24 13:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/30/24 11:06	10/01/24 13:07	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/30/24 11:06	10/01/24 13:07	1

Lab Sample ID: LCS 880-92118/1-A

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 92118

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09254		mg/Kg		93	70 - 130
Toluene	0.100	0.08706		mg/Kg		87	70 - 130
Ethylbenzene	0.100	0.08786		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1884		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09428		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-92118/2-A

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 92118

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08638		mg/Kg		86	70 - 130	7	35
Toluene	0.100	0.08080		mg/Kg		81	70 - 130	7	35
Ethylbenzene	0.100	0.08134		mg/Kg		81	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1756		mg/Kg		88	70 - 130	7	35
o-Xylene	0.100	0.08855		mg/Kg		89	70 - 130	6	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-49104-1 MS

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: S-1 (4.5')

Prep Type: Total/NA

Prep Batch: 92118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1	0.100	0.08091		mg/Kg		81	70 - 130
Toluene	<0.00201	U F1	0.100	0.07584		mg/Kg		76	70 - 130

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: 880-49104-1 MS

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: S-1 (4.5')

Prep Type: Total/NA

Prep Batch: 92118

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U F1	0.100	0.07607		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1642		mg/Kg		82	70 - 130
o-Xylene	<0.00201	U F1	0.100	0.08178		mg/Kg		82	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-49104-1 MSD

Matrix: Solid

Analysis Batch: 92214

Client Sample ID: S-1 (4.5')

Prep Type: Total/NA

Prep Batch: 92118

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1	0.100	0.06464	F1	mg/Kg		65	70 - 130	22	35
Toluene	<0.00201	U F1	0.100	0.06142	F1	mg/Kg		61	70 - 130	21	35
Ethylbenzene	<0.00201	U F1	0.100	0.06260	F1	mg/Kg		63	70 - 130	19	35
m-Xylene & p-Xylene	<0.00402	U F1	0.200	0.1348	F1	mg/Kg		67	70 - 130	20	35
o-Xylene	<0.00201	U F1	0.100	0.06860	F1	mg/Kg		69	70 - 130	18	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-91963/1-A

Matrix: Solid

Analysis Batch: 92182

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 91963

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		09/27/24 15:27	10/01/24 00:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/27/24 15:27	10/01/24 00:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/27/24 15:27	10/01/24 00:05	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130	09/27/24 15:27	10/01/24 00:05	1
o-Terphenyl	71		70 - 130	09/27/24 15:27	10/01/24 00:05	1

Lab Sample ID: LCS 880-91963/2-A

Matrix: Solid

Analysis Batch: 92182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 91963

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1060		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1075		mg/Kg		107	70 - 130

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: LCS 880-91963/2-A

Matrix: Solid

Analysis Batch: 92182

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 91963

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: LCSD 880-91963/3-A

Matrix: Solid

Analysis Batch: 92182

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 91963

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1169		mg/Kg		117	70 - 130	10	20
Diesel Range Organics (Over C10-C28)	1000	1215		mg/Kg		122	70 - 130	12	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	130		70 - 130

Lab Sample ID: MB 880-92041/1-A

Matrix: Solid

Analysis Batch: 92279

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 92041

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 20:31	10/01/24 21:43	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/29/24 20:31	10/01/24 21:43	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/29/24 20:31	10/01/24 21:43	1

	MB	MB		Prepared	Analyzed	Dil Fac
Surrogate	%Recovery	Qualifier	Limits			
1-Chlorooctane	145	S1+	70 - 130	09/29/24 20:31	10/01/24 21:43	1
o-Terphenyl	143	S1+	70 - 130	09/29/24 20:31	10/01/24 21:43	1

Lab Sample ID: LCS 880-92041/2-A

Matrix: Solid

Analysis Batch: 92279

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 92041

	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	974.6		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1135		mg/Kg		113	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	110		70 - 130

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-92041/3-A

Matrix: Solid

Analysis Batch: 92279

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 92041

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1086		mg/Kg		109	70 - 130	11	20
Diesel Range Organics (Over C10-C28)	1000	1297		mg/Kg		130	70 - 130	13	20
		LCSD	LCSD						
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	126		70 - 130						
o-Terphenyl	127		70 - 130						

Lab Sample ID: 880-49104-6 MS

Matrix: Solid

Analysis Batch: 92279

Client Sample ID: Stockpile 1

Prep Type: Total/NA

Prep Batch: 92041

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	991	869.1		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	991	877.5		mg/Kg		89	70 - 130		
		MS	MS								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	105		70 - 130								
o-Terphenyl	95		70 - 130								

Lab Sample ID: 880-49104-6 MSD

Matrix: Solid

Analysis Batch: 92279

Client Sample ID: Stockpile 1

Prep Type: Total/NA

Prep Batch: 92041

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	991	908.1		mg/Kg		92	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U	991	919.2		mg/Kg		93	70 - 130	5	20
		MSD	MSD								
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	109		70 - 130								
o-Terphenyl	98		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-92121/1-A

Matrix: Solid

Analysis Batch: 92165

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			10/01/24 16:41	1

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-92121/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 92165

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.3		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-92121/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Soluble

Analysis Batch: 92165

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	251.3		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

GC VOA

Prep Batch: 92118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	5035	
880-49104-2	S-2 (0-4')	Total/NA	Solid	5035	
880-49104-3	S-3 (0-4')	Total/NA	Solid	5035	
880-49104-4	S-4 (0-4')	Total/NA	Solid	5035	
880-49104-5	S-5 (0-4')	Total/NA	Solid	5035	
880-49104-6	Stockpile 1	Total/NA	Solid	5035	
880-49104-7	Stockpile 2	Total/NA	Solid	5035	
MB 880-92118/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-92118/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-92118/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-49104-1 MS	S-1 (4.5')	Total/NA	Solid	5035	
880-49104-1 MSD	S-1 (4.5')	Total/NA	Solid	5035	

Analysis Batch: 92214

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	8021B	92118
880-49104-2	S-2 (0-4')	Total/NA	Solid	8021B	92118
880-49104-3	S-3 (0-4')	Total/NA	Solid	8021B	92118
880-49104-4	S-4 (0-4')	Total/NA	Solid	8021B	92118
880-49104-5	S-5 (0-4')	Total/NA	Solid	8021B	92118
880-49104-6	Stockpile 1	Total/NA	Solid	8021B	92118
880-49104-7	Stockpile 2	Total/NA	Solid	8021B	92118
MB 880-92118/5-A	Method Blank	Total/NA	Solid	8021B	92118
LCS 880-92118/1-A	Lab Control Sample	Total/NA	Solid	8021B	92118
LCSD 880-92118/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	92118
880-49104-1 MS	S-1 (4.5')	Total/NA	Solid	8021B	92118
880-49104-1 MSD	S-1 (4.5')	Total/NA	Solid	8021B	92118

Analysis Batch: 92386

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	Total BTEX	
880-49104-2	S-2 (0-4')	Total/NA	Solid	Total BTEX	
880-49104-3	S-3 (0-4')	Total/NA	Solid	Total BTEX	
880-49104-4	S-4 (0-4')	Total/NA	Solid	Total BTEX	
880-49104-5	S-5 (0-4')	Total/NA	Solid	Total BTEX	
880-49104-6	Stockpile 1	Total/NA	Solid	Total BTEX	
880-49104-7	Stockpile 2	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 91963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	8015NM Prep	
880-49104-2	S-2 (0-4')	Total/NA	Solid	8015NM Prep	
880-49104-3	S-3 (0-4')	Total/NA	Solid	8015NM Prep	
880-49104-4	S-4 (0-4')	Total/NA	Solid	8015NM Prep	
880-49104-5	S-5 (0-4')	Total/NA	Solid	8015NM Prep	
MB 880-91963/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-91963/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-91963/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

GC Semi VOA

Prep Batch: 92041

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-6	Stockpile 1	Total/NA	Solid	8015NM Prep	
880-49104-7	Stockpile 2	Total/NA	Solid	8015NM Prep	
MB 880-92041/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-92041/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-92041/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-49104-6 MS	Stockpile 1	Total/NA	Solid	8015NM Prep	
880-49104-6 MSD	Stockpile 1	Total/NA	Solid	8015NM Prep	

Analysis Batch: 92182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	8015B NM	91963
880-49104-2	S-2 (0-4')	Total/NA	Solid	8015B NM	91963
880-49104-3	S-3 (0-4')	Total/NA	Solid	8015B NM	91963
880-49104-4	S-4 (0-4')	Total/NA	Solid	8015B NM	91963
880-49104-5	S-5 (0-4')	Total/NA	Solid	8015B NM	91963
MB 880-91963/1-A	Method Blank	Total/NA	Solid	8015B NM	91963
LCS 880-91963/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	91963
LCSD 880-91963/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	91963

Analysis Batch: 92273

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Total/NA	Solid	8015 NM	
880-49104-2	S-2 (0-4')	Total/NA	Solid	8015 NM	
880-49104-3	S-3 (0-4')	Total/NA	Solid	8015 NM	
880-49104-4	S-4 (0-4')	Total/NA	Solid	8015 NM	
880-49104-5	S-5 (0-4')	Total/NA	Solid	8015 NM	
880-49104-6	Stockpile 1	Total/NA	Solid	8015 NM	
880-49104-7	Stockpile 2	Total/NA	Solid	8015 NM	

Analysis Batch: 92279

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-6	Stockpile 1	Total/NA	Solid	8015B NM	92041
880-49104-7	Stockpile 2	Total/NA	Solid	8015B NM	92041
MB 880-92041/1-A	Method Blank	Total/NA	Solid	8015B NM	92041
LCS 880-92041/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	92041
LCSD 880-92041/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	92041
880-49104-6 MS	Stockpile 1	Total/NA	Solid	8015B NM	92041
880-49104-6 MSD	Stockpile 1	Total/NA	Solid	8015B NM	92041

HPLC/IC

Leach Batch: 92121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Soluble	Solid	DI Leach	
880-49104-2	S-2 (0-4')	Soluble	Solid	DI Leach	
880-49104-3	S-3 (0-4')	Soluble	Solid	DI Leach	
880-49104-4	S-4 (0-4')	Soluble	Solid	DI Leach	
880-49104-5	S-5 (0-4')	Soluble	Solid	DI Leach	
880-49104-6	Stockpile 1	Soluble	Solid	DI Leach	
880-49104-7	Stockpile 2	Soluble	Solid	DI Leach	
MB 880-92121/1-A	Method Blank	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Leach Batch: 92121 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-92121/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-92121/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 92165

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-49104-1	S-1 (4.5')	Soluble	Solid	300.0	92121
880-49104-2	S-2 (0-4')	Soluble	Solid	300.0	92121
880-49104-3	S-3 (0-4')	Soluble	Solid	300.0	92121
880-49104-4	S-4 (0-4')	Soluble	Solid	300.0	92121
880-49104-5	S-5 (0-4')	Soluble	Solid	300.0	92121
880-49104-6	Stockpile 1	Soluble	Solid	300.0	92121
880-49104-7	Stockpile 2	Soluble	Solid	300.0	92121
MB 880-92121/1-A	Method Blank	Soluble	Solid	300.0	92121
LCS 880-92121/2-A	Lab Control Sample	Soluble	Solid	300.0	92121
LCSD 880-92121/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	92121

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: S-1 (4.5')
Date Collected: 09/26/24 12:30
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-1
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			4.98 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 13:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 13:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 05:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	91963	09/27/24 15:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92182	10/01/24 05:18	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		10			92165	10/01/24 18:50	CH	EET MID

Client Sample ID: S-2 (0-4')
Date Collected: 09/26/24 12:35
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-2
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			5.01 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 13:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 13:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 05:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10.00 mL	91963	09/27/24 15:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92182	10/01/24 05:32	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		5			92165	10/01/24 18:56	CH	EET MID

Client Sample ID: S-3 (0-4')
Date Collected: 09/26/24 12:40
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-3
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	5035			5.03 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 14:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 14:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 05:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	91963	09/27/24 15:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92182	10/01/24 05:47	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		5			92165	10/01/24 19:01	CH	EET MID

Client Sample ID: S-4 (0-4')
Date Collected: 09/26/24 12:45
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-4
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	5035			4.98 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 14:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 14:30	SM	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: S-4 (0-4')
Date Collected: 09/26/24 12:45
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			92273	10/01/24 06:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10.00 mL	91963	09/27/24 15:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92182	10/01/24 06:01	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		5			92165	10/01/24 19:06	CH	EET MID

Client Sample ID: S-5 (0-4')
Date Collected: 09/26/24 12:50
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-5
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			5.01 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 14:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 14:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 06:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	91963	09/27/24 15:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92182	10/01/24 06:16	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		5			92165	10/01/24 19:12	CH	EET MID

Client Sample ID: Stockpile 1
Date Collected: 09/26/24 12:55
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-6
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			4.97 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 15:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 15:11	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 22:27	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10.00 mL	92041	09/29/24 20:31	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92279	10/01/24 22:27	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		1			92165	10/02/24 08:34	CH	EET MID

Client Sample ID: Stockpile 2
Date Collected: 09/26/24 13:00
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-7
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			4.97 g	5 mL	92118	09/30/24 11:06	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	92214	10/01/24 15:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			92386	10/01/24 15:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			92273	10/01/24 23:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	92041	09/29/24 20:31	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	92279	10/01/24 23:12	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Client Sample ID: Stockpile 2
Date Collected: 09/26/24 13:00
Date Received: 09/27/24 13:45

Lab Sample ID: 880-49104-7
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	92121	09/30/24 11:40	SA	EET MID
Soluble	Analysis	300.0		1			92165	10/01/24 19:18	CH	EET MID

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

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Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-49104-1
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: Chem State #4

Job ID: 880-49104-1
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: Chem State #4

Job ID: 880-49104-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-49104-1	S-1 (4.5')	Solid	09/26/24 12:30	09/27/24 13:45	4.5'
880-49104-2	S-2 (0-4')	Solid	09/26/24 12:35	09/27/24 13:45	0-4'
880-49104-3	S-3 (0-4')	Solid	09/26/24 12:40	09/27/24 13:45	0-4'
880-49104-4	S-4 (0-4')	Solid	09/26/24 12:45	09/27/24 13:45	0-4'
880-49104-5	S-5 (0-4')	Solid	09/26/24 12:50	09/27/24 13:45	0-4'
880-49104-6	Stockpile 1	Solid	09/26/24 12:55	09/27/24 13:45	
880-49104-7	Stockpile 2	Solid	09/26/24 13:00	09/27/24 13:45	

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Environment Testing
Xenco

Chain of Custody

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



www.xenco.com Page 1 of 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 <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	NM
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:

Project Name:		Turn Around		ANALYSIS REQUEST																Preservative Codes							
Project Number:		<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code																		None: NO DI Water: H ₂ O					
Project Location:		Due Date:		Parameters		TPH 8015M BTEX Chlorides																Cool: Cool MeOH: Me					
Sampler's Name:		TAT starts the day received by the lab, if received by 4:30pm																				HCL: HC HNO ₃ : HN					
PO #:																						H ₂ SO ₄ : H ₂ NaOH: Na					
																						H ₃ PO ₄ : HP					
SAMPLE RECEIPT		Temp Blank:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Wet Ice:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																		NaHSO ₄ : NABIS	
Samples Received Intact:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID:		CR1																		Na ₂ S ₂ O ₃ : NaSO ₃			
Cooler Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Correction Factor:		= 1																		Zn Acetate+NaOH: Zn			
Sample Custody Seals:		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Temperature Reading:		3.2																		NaOH+Ascorbic Acid: SAPC			
Total Containers:				Corrected Temperature:		3.1																					
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																	Sample Comments			
S-1 (4.5')		S	9/26/24	1230	4.5'	C	1																				
S-2 (0.4')				1235	0.4'																						
S-3 (0.4')				1240	0.4'																						
S-4 (0.4')				1245	0.4'																						
S-5 (0.4')				1250	0.4'																						
Stockpile 1				1255	-																						
Stockpile 2				1300	-																						

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 Ti 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 Ti 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	9/27/24 1345	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-49104-1

SDG Number: Lea Co., NM

Login Number: 49104

List Source: Eurofins Midland

List Number: 1

Creator: Rodriguez, Leticia

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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 2/17/2025 2:42:13 PM Revision 2

JOB DESCRIPTION

Chem State #4
Lea Co. NM

JOB NUMBER

880-50851-2

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701



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



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

Generated
2/17/2025 2:42:13 PM
Revision 2

Client: Crain Environmental
Project/Site: Chem State #4

Laboratory Job ID: 880-50851-2
SDG: Lea Co. NM

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Qualifiers

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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: Chem State #4

Job ID: 880-50851-2

Job ID: 880-50851-2**Eurofins Midland**

Job Narrative
880-50851-2

REVISION

The report being provided is a revision of the original report sent on 11/25/2024. The report (revision 2) is being revised due to Per client email, requesting sample time correction.

Report revision history

Revision 1 - 2/17/2025 - Reason - Incorrect COC attached. revision needed.

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 11/8/2024 1:35 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 3.2°C.

Diesel Range Organics

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.

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Client Sample ID: S-2 (0-4.5')

Lab Sample ID: 880-50851-13

Date Collected: 11/04/24 11:25

Matrix: Solid

Date Received: 11/08/24 13:35

Sample Depth: 0-4.5'

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			11/12/24 21:17	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		11/08/24 14:13	11/12/24 21:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		11/08/24 14:13	11/12/24 21:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/08/24 14:13	11/12/24 21:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130	11/08/24 14:13	11/12/24 21:17	1
o-Terphenyl	71		70 - 130	11/08/24 14:13	11/12/24 21:17	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	387		10.0		mg/Kg			11/12/24 03:34	1

Client Sample ID: S-3 (0-4.5')

Lab Sample ID: 880-50851-14

Date Collected: 11/04/24 11:30

Matrix: Solid

Date Received: 11/08/24 13:35

Sample Depth: 0-4.5'

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			11/12/24 21:32	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	<49.8	U *+	49.8		mg/Kg		11/08/24 14:13	11/12/24 21:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		11/08/24 14:13	11/12/24 21:32	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		11/08/24 14:13	11/12/24 21:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130	11/08/24 14:13	11/12/24 21:32	1
o-Terphenyl	84		70 - 130	11/08/24 14:13	11/12/24 21:32	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1640		50.4		mg/Kg			11/12/24 03:53	5

Client Sample ID: S-4 (0-4.5')

Lab Sample ID: 880-50851-15

Date Collected: 11/04/24 11:35

Matrix: Solid

Date Received: 11/08/24 13:35

Sample Depth: 0-4.5'

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			11/12/24 21:48	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Client Sample ID: S-4 (0-4.5')

Lab Sample ID: 880-50851-15

Date Collected: 11/04/24 11:35

Matrix: Solid

Date Received: 11/08/24 13:35

Sample Depth: 0-4.5'

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		11/08/24 14:13	11/12/24 21:48	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		11/08/24 14:13	11/12/24 21:48	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/08/24 14:13	11/12/24 21:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	41	S1-	70 - 130				11/08/24 14:13	11/12/24 21:48	1
o-Terphenyl	43	S1-	70 - 130				11/08/24 14:13	11/12/24 21:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2990		50.3		mg/Kg			11/12/24 04:00	5

Client Sample ID: S-5 (0-4.5')

Lab Sample ID: 880-50851-16

Date Collected: 11/04/24 11:40

Matrix: Solid

Date Received: 11/08/24 13:35

Sample Depth: 0-4.5'

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			11/12/24 22:03	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		11/08/24 14:13	11/12/24 22:03	1
Diesel Range Organics (Over C10-C28)	<49.7	U *1	49.7		mg/Kg		11/08/24 14:13	11/12/24 22:03	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		11/08/24 14:13	11/12/24 22:03	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				11/08/24 14:13	11/12/24 22:03	1
o-Terphenyl	81		70 - 130				11/08/24 14:13	11/12/24 22:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	696		10.1		mg/Kg			11/12/24 04:06	1

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Surrogate Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

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	OTPH1
		(70-130)	(70-130)
880-50851-13	S-2 (0-4.5')	71	71
880-50851-14	S-3 (0-4.5')	84	84
880-50851-15	S-4 (0-4.5')	41 S1-	43 S1-
880-50851-16	S-5 (0-4.5')	81	81
LCS 880-95275/2-A	Lab Control Sample	155 S1+	137 S1+
LCSD 880-95275/3-A	Lab Control Sample Dup	122	107
MB 880-95275/1-A	Method Blank	74	75

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

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

Lab Sample ID: MB 880-95275/1-A

Matrix: Solid

Analysis Batch: 95561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 95275

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		11/08/24 14:13	11/12/24 10:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		11/08/24 14:13	11/12/24 10:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		11/08/24 14:13	11/12/24 10:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	74		70 - 130	11/08/24 14:13	11/12/24 10:10	1
o-Terphenyl	75		70 - 130	11/08/24 14:13	11/12/24 10:10	1

Lab Sample ID: LCS 880-95275/2-A

Matrix: Solid

Analysis Batch: 95561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 95275

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1456	*+	mg/Kg		146	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1200		mg/Kg		120	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	155	S1+	70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: LCSD 880-95275/3-A

Matrix: Solid

Analysis Batch: 95561

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 95275

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1266		mg/Kg		127	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	1000	942.8	*1	mg/Kg		94	70 - 130	24	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	122		70 - 130
o-Terphenyl	107		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-95413/1-A

Matrix: Solid

Analysis Batch: 95430

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			11/12/24 03:14	1

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-95413/2-A

Matrix: Solid

Analysis Batch: 95430

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	261.4		mg/Kg		105	90 - 110

Lab Sample ID: LCSD 880-95413/3-A

Matrix: Solid

Analysis Batch: 95430

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	270.5		mg/Kg		108	90 - 110	3	20

Lab Sample ID: 880-50851-13 MS

Matrix: Solid

Analysis Batch: 95430

Client Sample ID: S-2 (0-4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	387		251	632.0		mg/Kg		98	90 - 110

Lab Sample ID: 880-50851-13 MSD

Matrix: Solid

Analysis Batch: 95430

Client Sample ID: S-2 (0-4.5')

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	387		251	637.6		mg/Kg		100	90 - 110	1	20

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

GC Semi VOA

Prep Batch: 95275

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50851-13	S-2 (0-4.5')	Total/NA	Solid	8015NM Prep	
880-50851-14	S-3 (0-4.5')	Total/NA	Solid	8015NM Prep	
880-50851-15	S-4 (0-4.5')	Total/NA	Solid	8015NM Prep	
880-50851-16	S-5 (0-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-95275/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-95275/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-95275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 95561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50851-13	S-2 (0-4.5')	Total/NA	Solid	8015B NM	95275
880-50851-14	S-3 (0-4.5')	Total/NA	Solid	8015B NM	95275
880-50851-15	S-4 (0-4.5')	Total/NA	Solid	8015B NM	95275
880-50851-16	S-5 (0-4.5')	Total/NA	Solid	8015B NM	95275
MB 880-95275/1-A	Method Blank	Total/NA	Solid	8015B NM	95275
LCS 880-95275/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	95275
LCSD 880-95275/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	95275

Analysis Batch: 95605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50851-13	S-2 (0-4.5')	Total/NA	Solid	8015 NM	
880-50851-14	S-3 (0-4.5')	Total/NA	Solid	8015 NM	
880-50851-15	S-4 (0-4.5')	Total/NA	Solid	8015 NM	
880-50851-16	S-5 (0-4.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 95413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50851-13	S-2 (0-4.5')	Soluble	Solid	DI Leach	
880-50851-14	S-3 (0-4.5')	Soluble	Solid	DI Leach	
880-50851-15	S-4 (0-4.5')	Soluble	Solid	DI Leach	
880-50851-16	S-5 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-95413/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-95413/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-95413/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-50851-13 MS	S-2 (0-4.5')	Soluble	Solid	DI Leach	
880-50851-13 MSD	S-2 (0-4.5')	Soluble	Solid	DI Leach	

Analysis Batch: 95430

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-50851-13	S-2 (0-4.5')	Soluble	Solid	300.0	95413
880-50851-14	S-3 (0-4.5')	Soluble	Solid	300.0	95413
880-50851-15	S-4 (0-4.5')	Soluble	Solid	300.0	95413
880-50851-16	S-5 (0-4.5')	Soluble	Solid	300.0	95413
MB 880-95413/1-A	Method Blank	Soluble	Solid	300.0	95413
LCS 880-95413/2-A	Lab Control Sample	Soluble	Solid	300.0	95413
LCSD 880-95413/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	95413
880-50851-13 MS	S-2 (0-4.5')	Soluble	Solid	300.0	95413
880-50851-13 MSD	S-2 (0-4.5')	Soluble	Solid	300.0	95413

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Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Client Sample ID: S-2 (0-4.5')**Lab Sample ID: 880-50851-13****Date Collected: 11/04/24 11:25****Matrix: Solid****Date Received: 11/08/24 13:35**

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			95605	11/12/24 21:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	95275	11/08/24 14:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95561	11/12/24 21:17	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	95413	11/11/24 11:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95430	11/12/24 03:34	CH	EET MID

Client Sample ID: S-3 (0-4.5')**Lab Sample ID: 880-50851-14****Date Collected: 11/04/24 11:30****Matrix: Solid****Date Received: 11/08/24 13:35**

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			95605	11/12/24 21:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	95275	11/08/24 14:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95561	11/12/24 21:32	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	95413	11/11/24 11:56	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	95430	11/12/24 03:53	CH	EET MID

Client Sample ID: S-4 (0-4.5')**Lab Sample ID: 880-50851-15****Date Collected: 11/04/24 11:35****Matrix: Solid****Date Received: 11/08/24 13:35**

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			95605	11/12/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	95275	11/08/24 14:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95561	11/12/24 21:48	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	95413	11/11/24 11:56	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	95430	11/12/24 04:00	CH	EET MID

Client Sample ID: S-5 (0-4.5')**Lab Sample ID: 880-50851-16****Date Collected: 11/04/24 11:40****Matrix: Solid****Date Received: 11/08/24 13:35**

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			95605	11/12/24 22:03	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	95275	11/08/24 14:13	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	95561	11/12/24 22:03	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	95413	11/11/24 11:56	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	95430	11/12/24 04:06	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-25
The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.			
Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH

Method Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-50851-2
SDG: Lea Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-50851-13	S-2 (0-4.5')	Solid	11/04/24 11:25	11/08/24 13:35	0-4.5'
880-50851-14	S-3 (0-4.5')	Solid	11/04/24 11:30	11/08/24 13:35	0-4.5'
880-50851-15	S-4 (0-4.5')	Solid	11/04/24 11:35	11/08/24 13:35	0-4.5'
880-50851-16	S-5 (0-4.5')	Solid	11/04/24 11:40	11/08/24 13:35	0-4.5'

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Environment Testing Xenco

Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1


Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	10ctane
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 <input type="checkbox"/>	PRP <input type="checkbox"/>	Brownfields <input type="checkbox"/>	RRC <input type="checkbox"/>	Superfund <input type="checkbox"/>
State of Project:	<i>NM</i>				
Reporting:	Level II <input type="checkbox"/>	Level III <input type="checkbox"/>	PST/UST <input type="checkbox"/>	TRRP <input type="checkbox"/>	Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/>	ADaPT <input type="checkbox"/>	Other:		

[illegible]

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	Ti	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	Ti	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 	J Kramer	11/08/2024 1335			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-50851-2

SDG Number: Lea Co. NM

Login Number: 50851

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	

This receipt checklist is generated for all samples received in this Login. It may not be applicable to all Jobs associated with this Login.

Eurofins Midland



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 12/26/2024 4:02:14 PM

JOB DESCRIPTION

Chem State #4

JOB NUMBER

880-52510-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

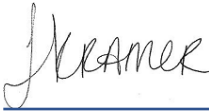
Eurofins Midland

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
12/26/2024 4:02:14 PM

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

Client: Crain Environmental
Project/Site: Chem State #4

Laboratory Job ID: 880-52510-1

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery exceeds control limits, low 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: Chem State #4

Job ID: 880-52510-1

Job ID: 880-52510-1

Eurofins Midland

Job Narrative
880-52510-1

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 12/19/2024 1:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C.

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: Surrogate recovery for the following samples were outside control limits: S-3 (0-4.5') (880-52510-1) and S-5 (0-4.5') (880-52510-3). Evidence of matrix interferences is not obvious.

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.

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Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Client Sample ID: S-3 (0-4.5')

Lab Sample ID: 880-52510-1

Date Collected: 12/18/24 11:00

Matrix: Solid

Date Received: 12/19/24 13:52

Sample Depth: 0 - 4.5

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		12/20/24 14:34	12/21/24 14:32	1
Toluene	<0.00201	U	0.00201		mg/Kg		12/20/24 14:34	12/21/24 14:32	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		12/20/24 14:34	12/21/24 14:32	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		12/20/24 14:34	12/21/24 14:32	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		12/20/24 14:34	12/21/24 14:32	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		12/20/24 14:34	12/21/24 14:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	12/20/24 14:34	12/21/24 14:32	1
1,4-Difluorobenzene (Surr)	94		70 - 130	12/20/24 14:34	12/21/24 14:32	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			12/21/24 14:32	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			12/24/24 05:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/24/24 05:00	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/24/24 05:00	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/24/24 05:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130	12/23/24 15:01	12/24/24 05:00	1
o-Terphenyl	72		70 - 130	12/23/24 15:01	12/24/24 05:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.6		9.90		mg/Kg			12/24/24 17:19	1

Client Sample ID: S-4 (0-4.5')

Lab Sample ID: 880-52510-2

Date Collected: 12/18/24 11:05

Matrix: Solid

Date Received: 12/19/24 13:52

Sample Depth: 0 - 4.5

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		12/20/24 14:34	12/21/24 14:52	1
Toluene	<0.00202	U	0.00202		mg/Kg		12/20/24 14:34	12/21/24 14:52	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		12/20/24 14:34	12/21/24 14:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		12/20/24 14:34	12/21/24 14:52	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		12/20/24 14:34	12/21/24 14:52	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		12/20/24 14:34	12/21/24 14:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	12/20/24 14:34	12/21/24 14:52	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Client Sample ID: S-4 (0-4.58')

Lab Sample ID: 880-52510-2

Date Collected: 12/18/24 11:05

Matrix: Solid

Date Received: 12/19/24 13:52

Sample Depth: 0 - 4.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	12/20/24 14:34	12/21/24 14:52	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			12/21/24 14:52	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			12/24/24 05:20	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		12/23/24 15:01	12/24/24 05:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		12/23/24 15:01	12/24/24 05:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		12/23/24 15:01	12/24/24 05:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	71		70 - 130				12/23/24 15:01	12/24/24 05:20	1
o-Terphenyl	74		70 - 130				12/23/24 15:01	12/24/24 05:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	86.5		10.0		mg/Kg			12/24/24 17:37	1

Client Sample ID: S-5 (0-4.5')

Lab Sample ID: 880-52510-3

Date Collected: 12/18/24 11:10

Matrix: Solid

Date Received: 12/19/24 13:52

Sample Depth: 0 - 4.5

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		12/20/24 14:34	12/21/24 15:13	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 15:13	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 15:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		12/20/24 14:34	12/21/24 15:13	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 15:13	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		12/20/24 14:34	12/21/24 15:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	12/20/24 14:34	12/21/24 15:13	1
1,4-Difluorobenzene (Surr)	97		70 - 130	12/20/24 14:34	12/21/24 15:13	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			12/21/24 15:13	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			12/24/24 05:40	1

Eurofins Midland

Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Client Sample ID: S-5 (0-4.5')
Date Collected: 12/18/24 11:10
Date Received: 12/19/24 13:52
Sample Depth: 0 - 4.5

Lab Sample ID: 880-52510-3
Matrix: Solid

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		12/23/24 15:01	12/24/24 05:40	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/24/24 05:40	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/24/24 05:40	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
1-Chlorooctane	62	S1-	70 - 130				12/23/24 15:01	12/24/24 05:40	1	
o-Terphenyl	64	S1-	70 - 130				12/23/24 15:01	12/24/24 05:40	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble										
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	82.1		10.1		mg/Kg			12/24/24 17:43	1	

Surrogate Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
880-52510-1	S-3 (0-4.5')	87	94
880-52510-2	S-4 (0-4.5')	87	98
880-52510-3	S-5 (0-4.5')	87	97
LCS 880-98490/1-A	Lab Control Sample	109	118
LCSD 880-98490/2-A	Lab Control Sample Dup	117	107
MB 880-98440/5-A	Method Blank	78	94
MB 880-98490/5-A	Method Blank	81	91

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	OTPH1
		(70-130)	(70-130)
880-52510-1	S-3 (0-4.5')	69 S1-	72
880-52510-2	S-4 (0-4.5')	71	74
880-52510-3	S-5 (0-4.5')	62 S1-	64 S1-
LCS 880-98721/2-A	Lab Control Sample	78	75
LCSD 880-98721/3-A	Lab Control Sample Dup	91	87
MB 880-98721/1-A	Method Blank	77	85

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-98440/5-A

Matrix: Solid

Analysis Batch: 98345

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98440

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/20/24 09:23	12/20/24 21:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/20/24 09:23	12/20/24 21:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/20/24 09:23	12/20/24 21:40	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/20/24 09:23	12/20/24 21:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/20/24 09:23	12/20/24 21:40	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/20/24 09:23	12/20/24 21:40	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	12/20/24 09:23	12/20/24 21:40	1
1,4-Difluorobenzene (Surr)	94		70 - 130	12/20/24 09:23	12/20/24 21:40	1

Lab Sample ID: MB 880-98490/5-A

Matrix: Solid

Analysis Batch: 98345

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98490

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 08:19	1
Toluene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 08:19	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 08:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		12/20/24 14:34	12/21/24 08:19	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		12/20/24 14:34	12/21/24 08:19	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		12/20/24 14:34	12/21/24 08:19	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130	12/20/24 14:34	12/21/24 08:19	1
1,4-Difluorobenzene (Surr)	91		70 - 130	12/20/24 14:34	12/21/24 08:19	1

Lab Sample ID: LCS 880-98490/1-A

Matrix: Solid

Analysis Batch: 98345

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98490

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1160		mg/Kg		116	70 - 130
Toluene	0.100	0.1140		mg/Kg		114	70 - 130
Ethylbenzene	0.100	0.1187		mg/Kg		119	70 - 130
m-Xylene & p-Xylene	0.200	0.2351		mg/Kg		118	70 - 130
o-Xylene	0.100	0.1149		mg/Kg		115	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	109		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: LCSD 880-98490/2-A

Matrix: Solid

Analysis Batch: 98345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98490

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1195		mg/Kg		120	70 - 130	3	35

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

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

Lab Sample ID: LCSD 880-98490/2-A

Matrix: Solid

Analysis Batch: 98345

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98490

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1153		mg/Kg		115	70 - 130	1	35
Ethylbenzene	0.100	0.1280		mg/Kg		128	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2529		mg/Kg		126	70 - 130	7	35
o-Xylene	0.100	0.1237		mg/Kg		124	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

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

Lab Sample ID: MB 880-98721/1-A

Matrix: Solid

Analysis Batch: 98591

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 98721

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		12/23/24 15:01	12/23/24 21:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/23/24 21:11	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		12/23/24 15:01	12/23/24 21:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	77		70 - 130	12/23/24 15:01	12/23/24 21:11	1
o-Terphenyl	85		70 - 130	12/23/24 15:01	12/23/24 21:11	1

Lab Sample ID: LCS 880-98721/2-A

Matrix: Solid

Analysis Batch: 98591

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 98721

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	721.6		mg/Kg		72	70 - 130
Diesel Range Organics (Over C10-C28)	1000	822.8		mg/Kg		82	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	78		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: LCSD 880-98721/3-A

Matrix: Solid

Analysis Batch: 98591

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98721

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	769.0		mg/Kg		77	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	893.6		mg/Kg		89	70 - 130	8	20

Eurofins Midland

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

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

Lab Sample ID: LCSD 880-98721/3-A

Matrix: Solid

Analysis Batch: 98591

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 98721

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

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-98551/1-A

Matrix: Solid

Analysis Batch: 98576

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB	MB								
	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<10.0	U	10.0		mg/Kg			12/24/24 15:39		1

Lab Sample ID: LCS 880-98551/2-A

Matrix: Solid

Analysis Batch: 98576

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte		Spike	LCS	LCS				%Rec		
		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride		250	264.8		mg/Kg		106	90 - 110		

Lab Sample ID: LCSD 880-98551/3-A

Matrix: Solid

Analysis Batch: 98576

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte		Spike	LCSD	LCSD				%Rec		RPD
		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride		250	265.1		mg/Kg		106	90 - 110	0	20

Lab Sample ID: 880-52510-1 MS

Matrix: Solid

Analysis Batch: 98576

Client Sample ID: S-3 (0-4.5')

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS			%Rec		
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	64.6		248	334.9		mg/Kg		109	90 - 110	

Lab Sample ID: 880-52510-1 MSD

Matrix: Solid

Analysis Batch: 98576

Client Sample ID: S-3 (0-4.5')

Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD			%Rec		RPD
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	Limit
Chloride	64.6		248	334.9		mg/Kg		109	90 - 110	0 20

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

GC VOA

Analysis Batch: 98345

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	8021B	98490
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	8021B	98490
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	8021B	98490
MB 880-98440/5-A	Method Blank	Total/NA	Solid	8021B	98440
MB 880-98490/5-A	Method Blank	Total/NA	Solid	8021B	98490
LCS 880-98490/1-A	Lab Control Sample	Total/NA	Solid	8021B	98490
LCSD 880-98490/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	98490

Prep Batch: 98440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-98440/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 98490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	5035	
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	5035	
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	5035	
MB 880-98490/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-98490/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-98490/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 98753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	Total BTEX	
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	Total BTEX	
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 98591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	8015B NM	98721
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	8015B NM	98721
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	8015B NM	98721
MB 880-98721/1-A	Method Blank	Total/NA	Solid	8015B NM	98721
LCS 880-98721/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	98721
LCSD 880-98721/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	98721

Prep Batch: 98721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	8015NM Prep	
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	8015NM Prep	
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-98721/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-98721/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-98721/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 98801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Total/NA	Solid	8015 NM	
880-52510-2	S-4 (0-4.5')	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

GC Semi VOA (Continued)

Analysis Batch: 98801 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-3	S-5 (0-4.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 98551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Soluble	Solid	DI Leach	
880-52510-2	S-4 (0-4.5')	Soluble	Solid	DI Leach	
880-52510-3	S-5 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-98551/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-98551/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-98551/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-52510-1 MS	S-3 (0-4.5')	Soluble	Solid	DI Leach	
880-52510-1 MSD	S-3 (0-4.5')	Soluble	Solid	DI Leach	

Analysis Batch: 98576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-52510-1	S-3 (0-4.5')	Soluble	Solid	300.0	98551
880-52510-2	S-4 (0-4.5')	Soluble	Solid	300.0	98551
880-52510-3	S-5 (0-4.5')	Soluble	Solid	300.0	98551
MB 880-98551/1-A	Method Blank	Soluble	Solid	300.0	98551
LCS 880-98551/2-A	Lab Control Sample	Soluble	Solid	300.0	98551
LCSD 880-98551/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	98551
880-52510-1 MS	S-3 (0-4.5')	Soluble	Solid	300.0	98551
880-52510-1 MSD	S-3 (0-4.5')	Soluble	Solid	300.0	98551

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

Client Sample ID: S-3 (0-4.5')

Lab Sample ID: 880-52510-1

Date Collected: 12/18/24 11:00

Matrix: Solid

Date Received: 12/19/24 13:52

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	98490	12/20/24 14:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98345	12/21/24 14:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98753	12/21/24 14:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			98801	12/24/24 05:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98721	12/23/24 15:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98591	12/24/24 05:00	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	98551	12/21/24 14:11	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98576	12/24/24 17:19	CH	EET MID

Client Sample ID: S-4 (0-4.5')

Lab Sample ID: 880-52510-2

Date Collected: 12/18/24 11:05

Matrix: Solid

Date Received: 12/19/24 13:52

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	98490	12/20/24 14:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98345	12/21/24 14:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98753	12/21/24 14:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			98801	12/24/24 05:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	98721	12/23/24 15:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98591	12/24/24 05:20	SM	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	98551	12/21/24 14:11	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98576	12/24/24 17:37	CH	EET MID

Client Sample ID: S-5 (0-4.5')

Lab Sample ID: 880-52510-3

Date Collected: 12/18/24 11:10

Matrix: Solid

Date Received: 12/19/24 13:52

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	98490	12/20/24 14:34	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	98345	12/21/24 15:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			98753	12/21/24 15:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			98801	12/24/24 05:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	98721	12/23/24 15:01	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	98591	12/24/24 05:40	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	98551	12/21/24 14:11	CH	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	98576	12/24/24 17:43	CH	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-52510-1

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: Chem State #4

Job ID: 880-52510-1

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: Chem State #4

Job ID: 880-52510-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-52510-1	S-3 (0-4.5')	Solid	12/18/24 11:00	12/19/24 13:52	0 - 4.5
880-52510-2	S-4 (0-4.58')	Solid	12/18/24 11:05	12/19/24 13:52	0 - 4.5
880-52510-3	S-5 (0-4.5')	Solid	12/18/24 11:10	12/19/24 13:52	0 - 4.5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-52510-1

Login Number: 52510

List Number: 1

Creator: Lee, Randell

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	



Environment Testing

- 1
- 2
- 3
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- 14

ANALYTICAL REPORT

PREPARED FOR

Attn: Cindy Crain
Crain Environmental
2925 E. 17th St.
Odessa, Texas 79761
Generated 2/28/2025 7:56:01 PM

JOB DESCRIPTION

Chem State #4
Lea Co. NM

JOB NUMBER

880-54894-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

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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2/28/2025 7:56:01 PM

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

Client: Crain Environmental
Project/Site: Chem State #4

Laboratory Job ID: 880-54894-1
SDG: Lea Co. NM

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Definitions/Glossary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
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
S1-	Surrogate recovery exceeds control limits, low 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: Chem State #4

Job ID: 880-54894-1

Job ID: 880-54894-1

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Job Narrative 880-54894-1

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 2/26/2025 8:35 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 5.1°C.

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: S-6 (4.5') (880-54894-1), S-7 (4.5') (880-54894-2) and S-2 (0-4.5') (880-54894-3).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-103706 recovered above the upper control limit for Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-103706/33).

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: Surrogate recovery for the following samples were outside control limits: S-6 (4.5') (880-54894-1), S-7 (4.5') (880-54894-2) and S-2 (0-4.5') (880-54894-3). Evidence of matrix interferences is not obvious.

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.

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Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Client Sample ID: S-6 (4.5')

Lab Sample ID: 880-54894-1

Date Collected: 02/25/25 13:50

Matrix: Solid

Date Received: 02/26/25 08:35

Sample Depth: 4.5

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		02/26/25 11:04	02/27/25 01:47	1
Toluene	<0.00202	U	0.00202		mg/Kg		02/26/25 11:04	02/27/25 01:47	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		02/26/25 11:04	02/27/25 01:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		02/26/25 11:04	02/27/25 01:47	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		02/26/25 11:04	02/27/25 01:47	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		02/26/25 11:04	02/27/25 01:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	02/26/25 11:04	02/27/25 01:47	1
1,4-Difluorobenzene (Surr)	81		70 - 130	02/26/25 11:04	02/27/25 01:47	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			02/27/25 01:47	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			02/27/25 22:41	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:41	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:41	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	02/26/25 10:50	02/27/25 22:41	1
o-Terphenyl	69	S1-	70 - 130	02/26/25 10:50	02/27/25 22:41	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	196		9.92		mg/Kg			02/28/25 00:57	1

Client Sample ID: S-7 (4.5')

Lab Sample ID: 880-54894-2

Date Collected: 02/25/25 13:48

Matrix: Solid

Date Received: 02/26/25 08:35

Sample Depth: 4.5

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		02/26/25 11:04	02/27/25 03:12	1
Toluene	<0.00201	U	0.00201		mg/Kg		02/26/25 11:04	02/27/25 03:12	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		02/26/25 11:04	02/27/25 03:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		02/26/25 11:04	02/27/25 03:12	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		02/26/25 11:04	02/27/25 03:12	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		02/26/25 11:04	02/27/25 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	02/26/25 11:04	02/27/25 03:12	1

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Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Client Sample ID: S-7 (4.5')

Lab Sample ID: 880-54894-2

Date Collected: 02/25/25 13:48

Matrix: Solid

Date Received: 02/26/25 08:35

Sample Depth: 4.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	02/26/25 11:04	02/27/25 03:12	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			02/27/25 03:12	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			02/27/25 22:55	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	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:55	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:55	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		02/26/25 10:50	02/27/25 22:55	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	81		70 - 130				02/26/25 10:50	02/27/25 22:55	1
o-Terphenyl	67	S1-	70 - 130				02/26/25 10:50	02/27/25 22:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	264		9.98		mg/Kg			02/28/25 01:03	1

Client Sample ID: S-2 (0-4.5')

Lab Sample ID: 880-54894-3

Date Collected: 02/25/25 13:46

Matrix: Solid

Date Received: 02/26/25 08:35

Sample Depth: 0-4.5

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		02/26/25 11:04	02/27/25 03:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/27/25 03:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/27/25 03:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		02/26/25 11:04	02/27/25 03:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/27/25 03:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		02/26/25 11:04	02/27/25 03:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	02/26/25 11:04	02/27/25 03:32	1
1,4-Difluorobenzene (Surr)	92		70 - 130	02/26/25 11:04	02/27/25 03:32	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			02/27/25 03:32	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			02/27/25 23:10	1

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Client Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Client Sample ID: S-2 (0-4.5')

Lab Sample ID: 880-54894-3

Date Collected: 02/25/25 13:46

Matrix: Solid

Date Received: 02/26/25 08:35

Sample Depth: 0-4.5

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		02/26/25 10:50	02/27/25 23:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/26/25 10:50	02/27/25 23:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/26/25 10:50	02/27/25 23:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130				02/26/25 10:50	02/27/25 23:10	1
o-Terphenyl	69	S1-	70 - 130				02/26/25 10:50	02/27/25 23:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33.3		10.1		mg/Kg			02/28/25 01:09	1

Surrogate Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
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	DFBZ1
		(70-130)	(70-130)
880-54894-1	S-6 (4.5')	92	81
880-54894-2	S-7 (4.5')	87	90
880-54894-3	S-2 (0-4.5')	103	92
LCS 880-103741/1-A	Lab Control Sample	98	112
LCSD 880-103741/2-A	Lab Control Sample Dup	110	102
MB 880-103715/5-A	Method Blank	88	95
MB 880-103741/5-A	Method Blank	83	96

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	OTPH1
		(70-130)	(70-130)
880-54894-1	S-6 (4.5')	85	69 S1-
880-54894-2	S-7 (4.5')	81	67 S1-
880-54894-3	S-2 (0-4.5')	85	69 S1-
LCS 880-103737/2-A	Lab Control Sample	94	84
LCSD 880-103737/3-A	Lab Control Sample Dup	93	83
MB 880-103737/1-A	Method Blank	120	107

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-103715/5-A

Matrix: Solid

Analysis Batch: 103706

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103715

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/25 09:07	02/26/25 11:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/25 09:07	02/26/25 11:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/25 09:07	02/26/25 11:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/26/25 09:07	02/26/25 11:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/25 09:07	02/26/25 11:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/26/25 09:07	02/26/25 11:41	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	02/26/25 09:07	02/26/25 11:41	1
1,4-Difluorobenzene (Surr)	95		70 - 130	02/26/25 09:07	02/26/25 11:41	1

Lab Sample ID: MB 880-103741/5-A

Matrix: Solid

Analysis Batch: 103706

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/26/25 22:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/26/25 22:21	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/26/25 22:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		02/26/25 11:04	02/26/25 22:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		02/26/25 11:04	02/26/25 22:21	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		02/26/25 11:04	02/26/25 22:21	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	02/26/25 11:04	02/26/25 22:21	1
1,4-Difluorobenzene (Surr)	96		70 - 130	02/26/25 11:04	02/26/25 22:21	1

Lab Sample ID: LCS 880-103741/1-A

Matrix: Solid

Analysis Batch: 103706

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103741

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1194		mg/Kg		119	70 - 130
Toluene	0.100	0.1014		mg/Kg		101	70 - 130
Ethylbenzene	0.100	0.1091		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	0.200	0.2151		mg/Kg		108	70 - 130
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-103741/2-A

Matrix: Solid

Analysis Batch: 103706

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103741

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1201		mg/Kg		120	70 - 130	1	35

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

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

Lab Sample ID: LCSD 880-103741/2-A

Matrix: Solid

Analysis Batch: 103706

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103741

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1160		mg/Kg		116	70 - 130	13	35
Ethylbenzene	0.100	0.1256		mg/Kg		126	70 - 130	14	35
m-Xylene & p-Xylene	0.200	0.2560		mg/Kg		128	70 - 130	17	35
o-Xylene	0.100	0.1275		mg/Kg		128	70 - 130	18	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

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

Lab Sample ID: MB 880-103737/1-A

Matrix: Solid

Analysis Batch: 103814

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 103737

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		02/26/25 10:40	02/27/25 17:31	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		02/26/25 10:40	02/27/25 17:31	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		02/26/25 10:40	02/27/25 17:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	120		70 - 130	02/26/25 10:40	02/27/25 17:31	1
o-Terphenyl	107		70 - 130	02/26/25 10:40	02/27/25 17:31	1

Lab Sample ID: LCS 880-103737/2-A

Matrix: Solid

Analysis Batch: 103814

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 103737

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1189		mg/Kg		119	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1067		mg/Kg		107	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	84		70 - 130

Lab Sample ID: LCSD 880-103737/3-A

Matrix: Solid

Analysis Batch: 103814

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103737

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1147		mg/Kg		115	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1034		mg/Kg		103	70 - 130	3	20

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QC Sample Results

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

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

Lab Sample ID: LCSD 880-103737/3-A

Matrix: Solid

Analysis Batch: 103814

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 103737

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	83		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-103756/1-A

Matrix: Solid

Analysis Batch: 103850

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<10.0	U	10.0		mg/Kg			02/28/25 00:22		1

Lab Sample ID: LCS 880-103756/2-A

Matrix: Solid

Analysis Batch: 103850

Client Sample ID: Lab Control Sample

Prep Type: Soluble

		Spike	LCS	LCS				%Rec		
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride		250	261.4		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-103756/3-A

Matrix: Solid

Analysis Batch: 103850

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

		Spike	LCSD	LCSD				%Rec		RPD
Analyte		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride		250	262.2		mg/Kg		105	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

GC VOA

Analysis Batch: 103706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	8021B	103741
880-54894-2	S-7 (4.5')	Total/NA	Solid	8021B	103741
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	8021B	103741
MB 880-103715/5-A	Method Blank	Total/NA	Solid	8021B	103715
MB 880-103741/5-A	Method Blank	Total/NA	Solid	8021B	103741
LCS 880-103741/1-A	Lab Control Sample	Total/NA	Solid	8021B	103741
LCSD 880-103741/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	103741

Prep Batch: 103715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-103715/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 103741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	5035	
880-54894-2	S-7 (4.5')	Total/NA	Solid	5035	
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	5035	
MB 880-103741/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-103741/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-103741/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 104011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	Total BTEX	
880-54894-2	S-7 (4.5')	Total/NA	Solid	Total BTEX	
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 103737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	8015NM Prep	
880-54894-2	S-7 (4.5')	Total/NA	Solid	8015NM Prep	
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	8015NM Prep	
MB 880-103737/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-103737/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-103737/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 103814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	8015B NM	103737
880-54894-2	S-7 (4.5')	Total/NA	Solid	8015B NM	103737
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	8015B NM	103737
MB 880-103737/1-A	Method Blank	Total/NA	Solid	8015B NM	103737
LCS 880-103737/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	103737
LCSD 880-103737/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	103737

Analysis Batch: 103996

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Total/NA	Solid	8015 NM	
880-54894-2	S-7 (4.5')	Total/NA	Solid	8015 NM	

Eurofins Midland

QC Association Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

GC Semi VOA (Continued)

Analysis Batch: 103996 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-3	S-2 (0-4.5')	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 103756

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Soluble	Solid	DI Leach	
880-54894-2	S-7 (4.5')	Soluble	Solid	DI Leach	
880-54894-3	S-2 (0-4.5')	Soluble	Solid	DI Leach	
MB 880-103756/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-103756/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-103756/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 103850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-54894-1	S-6 (4.5')	Soluble	Solid	300.0	103756
880-54894-2	S-7 (4.5')	Soluble	Solid	300.0	103756
880-54894-3	S-2 (0-4.5')	Soluble	Solid	300.0	103756
MB 880-103756/1-A	Method Blank	Soluble	Solid	300.0	103756
LCS 880-103756/2-A	Lab Control Sample	Soluble	Solid	300.0	103756
LCSD 880-103756/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	103756

Lab Chronicle

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Client Sample ID: S-6 (4.5')**Lab Sample ID: 880-54894-1****Date Collected: 02/25/25 13:50****Matrix: Solid****Date Received: 02/26/25 08:35**

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	103741	02/26/25 11:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	103706	02/27/25 01:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104011	02/27/25 01:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103996	02/27/25 22:41	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	103737	02/26/25 10:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	103814	02/27/25 22:41	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	103756	02/26/25 14:48	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	103850	02/28/25 00:57	SMC	EET MID

Client Sample ID: S-7 (4.5')**Lab Sample ID: 880-54894-2****Date Collected: 02/25/25 13:48****Matrix: Solid****Date Received: 02/26/25 08:35**

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	103741	02/26/25 11:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	103706	02/27/25 03:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104011	02/27/25 03:12	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103996	02/27/25 22:55	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	103737	02/26/25 10:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	103814	02/27/25 22:55	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	103756	02/26/25 14:48	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	103850	02/28/25 01:03	SMC	EET MID

Client Sample ID: S-2 (0-4.5')**Lab Sample ID: 880-54894-3****Date Collected: 02/25/25 13:46****Matrix: Solid****Date Received: 02/26/25 08:35**

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	103741	02/26/25 11:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	103706	02/27/25 03:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			104011	02/27/25 03:32	AJ	EET MID
Total/NA	Analysis	8015 NM		1			103996	02/27/25 23:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	103737	02/26/25 10:50	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	103814	02/27/25 23:10	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	103756	02/26/25 14:48	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	103850	02/28/25 01:09	SMC	EET MID

Laboratory References:

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

Eurofins Midland

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Chem State #4

Job ID: 880-54894-1
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: Chem State #4

Job ID: 880-54894-1
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: Chem State #4

Job ID: 880-54894-1
SDG: Lea Co. NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-54894-1	S-6 (4.5')	Solid	02/25/25 13:50	02/26/25 08:35	4.5
880-54894-2	S-7 (4.5')	Solid	02/25/25 13:48	02/26/25 08:35	4.5
880-54894-3	S-2 (0-4.5')	Solid	02/25/25 13:46	02/26/25 08:35	0-4.5

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14



Environment Testing
Xenco

Chain of Custody

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

Work Order



880-54894 Chain of Custody

www.xenco.com Page

Project Manager:	Cindy Crain	Bill to: (if different)	Chris Gaddy
Company Name:	Crain Environmental	Company Name:	Octane
Address:	2925 E. 17th St.	Address:	310 N. 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 <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>
State of Project:	
Reporting:	Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>
Deliverables:	EDD <input type="checkbox"/> ADaPT <input type="checkbox"/> Other:

Project Name:	Chem State #4		Turn Around		ANALYSIS REQUEST												Preservative Codes			
Project Number:			<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush		Pres. Code													None: NO DI Water: H ₂ O		
Project Location:	Lea Co., NM		Due Date:		Parameters TPH 8015M BTEX Chlorides													Cool: Cool MeOH: Me		
Sampler's Name:	Cindy Crain		TAT starts the day received by the lab, if received by 4:30pm															HCL: HC HNO ₃ : HN		
P.O. #:																		H ₂ SO ₄ : H ₂ NaOH: Na		
SAMPLE RECEIPT		Temp Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Wet Ice: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>														H ₃ PO ₄ : HP		
Samples Received Intact:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Thermometer ID:																NaHSO ₄ : NABIS	
Cooler Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Correction Factor:																Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A		Temperature Reading:																Zn Acetate+NaOH: Zn	
Total Containers:			Corrected Temperature:																NaOH+Ascorbic Acid: SAPC	
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont													Sample Comments	
S-6 (4.5')	S	2/25/25	1350	4.5'	C	1														
S-7 (4.5')	↓	↓	1348	4.5'	↓	↓														
S-2 (0-4.5')	↓	↓	1346	0-4.5'	↓	↓														

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti 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 Ti 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		2/26/25 835	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-54894-1

SDG Number: Lea Co. NM

Login Number: 54894

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
Chem State #4



View of well sign (10/25/23).



View of staining at wellhead (10/25/23).



View of sample collection (3/12/24).



View of excavation (9/26/24).



View of excavation (12/18/24).



View of excavation (12/18/24).



View of excavation (12/18/24).



View to NE of excavation (2/25/25).



Appendix E: Waste Manifests



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
106288
09/17/24 01:56 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: 1
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
106309
09/17/24 04:54 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181

Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
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: 1
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 above.

OSCAR A. MORALES

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-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.)

Name

Signature

Kimberly Murphy

Name

Signature

Kimberly Murphy



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107140
10/08/24 10:42 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 07
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107179
10/08/24 03:22 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 07
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107180
10/08/24 03:23 PM**GENERATOR**Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:**DISPOSAL FACILITY**Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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

TRANSPORTERName: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107139
10/08/24 10:41 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)0C0-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 above.

Driver Signature

C-139

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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107264
10/09/24 04:30 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADLEY
Phone Number: (000)000-C000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107236
10/09/24 01:14 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181

Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADLEY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
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: SBROS
Address:
Phone No.:

Driver Name:
Truck Number: 09
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 above.

James G. Zappone

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-oil field 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

Kimberly Murphy

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107211
10/09/24 09:50 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (00C)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-dified 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



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107265
10/09/24 04:31 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 07
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 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-oiled 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



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107212
10/09/24 09:51 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 07
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 above.

Driver Signature

C-133

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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107237
10/09/24 01:14 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)00C-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: SBROS
Address:
Phone No.:Driver Name:
Truck Number: 07
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 above.

JAIME QUEZADA

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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107296
10/10/24 12:57 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181

Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
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: QUEZADA
Address:
Phone No.:

Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107317
10/10/24 03:59 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107284
10/10/24 09:48 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM CTATE #4
Location: CHEM CTATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



Location of Origin
Lease/Well _____
Name & No. _____
County _____
API No. _____
Rig Name & No. _____
AFE/PO No. _____

Name/No.	Landfill
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Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES 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.

DRIVER'S SIGNATURE

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		

❑ Gathering Lines

(All non-exempt E&P waste must be analyzed and be below the threshold limits for toxicity (TCLP), ignition, corrosiveness, and reactivity.)

*Please select from Non-Exempt Waste List on back.

QUANTITY: _____ B - Barrels _____ L - Liquid _____ Y - Yards _____ E - Each

I hereby certify that according to the Resource Conservation and Recovery Act (RCRA) and the US Environmental Protection Agency (EPA) 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 (e.g., drilling fluids, completion fluids, produced water, etc.) are exempt from RCRA hazardous waste regulations. (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, 40 CFR 261.21-261.24, or listed hazardous waste as defined by 40 C demonstrating the waste as non-hazardous is attached. (Check the appropriate characteristics established in RCRA ed. The following documentation

MSDS Information

RCRA Hazardous Waste Analysis

Description Below)

☐ **EMERGENCY NON-OILFIELD:** Emergency non-hazardous, non-oilfield waste that has been ordered by the Department of Environmental Protection. (Emergency waste determination and a description of the waste must accompany this form.)

DATE _____

NAME (PRINT)

DATE _____

GMI

TITLE

SIGNATURE

SUPERIOR PRINTING SERVICE, INC.

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST / DISPOSAL TICKET

GM inc.

72106

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: 4:25 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
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (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	_____	OTHER NON-EXEMPT WASTE	_____
Produced Formation Solids	_____	Truck Washout /Jet Out	_____		_____
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.)☐ 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. (Check the appropriate items as provided.)☐ 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

NAME (PRINT)

DATE

TITLE

SIGNATURE

GM inc.

72067

GENERATOR

Generator Name Lumberton
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin Chen STATE PH
 Lease/Well _____
 Name & No. _____
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMP

IN: 9:32 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
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

TRANSPORTER

Transporter's Name Quezada 3003
 Address _____
 Phone No. _____

Print Name _____
 Truck No. 27
 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 _____
 Oil Based Cuttings _____
 Water Based Muds _____
 Water Based Cuttings _____
 Produced Formation Solids _____
 Tank Bottoms _____
 E&P Contaminated Soil _____
 Gas Plant Waste _____

Completion Fluid/Flowback _____
 Produced Water (Non-Injectable) _____
 Gathering Line Water/Waste _____
 Cement Water _____
 Truck Washout /Jet Out _____
 Trash & Debris _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT 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.)

☐ 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. (Check the appropriate items as provided.)

☐ 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.

GM inc.

72066

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: 4-30 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

Pass the Paint Filter Test? (Circle One) YES NO

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

TRANSPORTER

Transporter's Name _____

Print Name _____

Address _____

Truck No. _____

Phone 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 _____
 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 _____
 Tank Bottoms _____ Trash & Debris _____
 E&P Contaminated Soil _____
 Gas Plant Waste _____

OTHER EXEMPT WASTE

OTHER NON-EXEMPT 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.)

☐ 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. (Check the appropriate items as provided.)

☐ 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.

GM inc.

72083

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: 12:30 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**
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (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

10/11/24 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	_____	OTHER NON-EXEMPT WASTE	_____
Produced Formation Solids	_____	Truck Washout /Jet Out	_____		_____
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.)☐ 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. (Check the appropriate items as provided.)☐ 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

NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST / DISPOSAL TICKET

GM inc.

72107

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)
 Address P.O. Box 1658 Roswell, NM 88202
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (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	_____	OTHER NON-EXEMPT WASTE	_____
Produced Formation Solids	_____	Truck Washout /Jet Out	_____		_____
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.)

☐ 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. (Check the appropriate items as provided.)

☐ 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



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107345
10/14/24 01:33 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107330
10/14/24 09:50 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADE
Address:
Phone No.:Driver Name:
Truck Number: 09
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107329
10/14/24 09:49 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
Email:

DISPOSAL FACILITY

Site Name/Permit No.: Commercial Landfarm (NM-711-1-0020)
P.O. Box 1658
Roswell, NM 88202
Office (575) 347-0434
Fax (575)347-0435NORM 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: QUEZADA
Address:
Phone No.:Driver Name:
Truck Number: 07
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107809
10/28/24 11:50 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
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)347-0435NORM 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: EL PRIMO TRUCKING
Address:
Phone No.:Driver Name:
Truck Number: 1
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-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.)

Name

Signature

Kimberly Murphy

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
107835
10/28/24 03:00 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #2
Location: CHEM STATE #2
Job Contact: _____
Phone Number: (000)000-0000
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)347-0435NORM 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: EL PRIMO TRUCKING
Address:
Phone No.:Driver Name:
Truck Number: 1
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 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-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.)

Name

Signature

Kimberly Murphy

Name

Signature

GMI inc.

72252

GENERATOR

Generator Name Campbell
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin
 Lease/Well Campbell
 Name & No. 2211-014
 County _____
 API No. _____
 Rig Name & No. _____
 AFE/PO No. _____

TRUCK TIME STAMPIN: 9:25 AM 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
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434

If YES, was reading > 50 micro roentgens? (Circle One) YES NO

TRANSPORTER

Transporter's Name Prime Transporting
 Address _____
 Phone No. _____

Print Name _____
 Truck No. 1
 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	_____	OTHER NON-EXEMPT WASTE	_____
Produced Formation Solids	_____	Truck Washout /Jet Out	_____		_____
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.)☐ 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. (Check the appropriate items as provided.)☐ 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



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
110558
12/19/24 09:50 AM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
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)347-0435NORM 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.)

☐ 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-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.)

Name

Signature

Billy Jack Clayton

Name

Signature



NEW MEXICO NON-HAZARDOUS OILFIELD WASTE MANIFEST/DISPOSAL TICKET

Ticket Number
110603
12/19/24 12:54 PM

GENERATOR

Generator: CAMBRIAN MANAGEMENT
Generator Contact:
PO BOX 272
MIDLAND, TX 79702
Phone No.: (432)620-9181Lease: CHEM STATE #4
Location: CHEM STATE #4
Job Contact: CHRIS GADDY
Phone Number: (000)000-0000
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)347-0435NORM 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.)

☐ RCRA NON-EXEMPT:

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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.)

Name

Signature

Billy Jack Clayton

Name

Signature

GMI inc.

73760

GENERATOR

Generator Name Concave Management
 Address _____
 City, State, Zip _____
 Phone No. _____
 Company Man _____

Location of Origin Chlor Stays #4
 Lease/Well _____
 Name & No. East A Stays #4
 County _____
 API No. 60-423-18614
 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
 NORM Readings Taken? (Circle One) YES NO
 Pass the Paint Filter Test? (Circle One) YES NO

Phone No. 575-347-0434
 If YES, was reading > 50 micro roentgens? (Circle One) YES NO

TRANSPORTER

Transporter's Name Paula's Trucking
 Address _____
 Phone No. _____

Print Name SAUL N. NICHOLS
 Truck No. 977
 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 _____	OTHER NON-EXEMPT WASTE _____
Produced Formation Solids _____	Truck Washout /Jet Out _____	_____
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)

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☐ 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. (Check the appropriate items as provided.)

☐ 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

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 447270

QUESTIONS

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2426161980
Incident Name	NAPP2426161980 CHEM STATE #4 @ 30-025-23075
Incident Type	Oil Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-025-23075] CHEM STATE #004

Location of Release Source*Please answer all the questions in this group.*

Site Name	CHEM STATE #4
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 Fitting Crude Oil Released: 3 BBL Recovered: 2 BBL Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Normal Operations Fitting Produced Water Released: 3 BBL Recovered: 2 BBL Lost: 1 BBL.
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)	Not answered.

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QUESTIONS, Page 2

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	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	The Chem State #4 well has been P&A'd and the site is being remediated/reclaimed according to State Land Office (SLO) specifications. Upon submitting a Reclamation and Remediation Workplan to the SLO, they requested an investigation of any soil stained areas at the wellhead. This NOR is being submitted a result of samples collected around the wellhead that reported TPH concentrations above the OCD Closure Criteria. This is a historical release.

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: 03/31/2025
--	--

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Santa Fe, NM 87505

QUESTIONS, Page 3

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Site Characterization	
<i>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.</i>	
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 1000 (ft.) and ½ (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 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	Between 1000 (ft.) and ½ (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1000 (ft.) and ½ (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1000 (ft.) and ½ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	Yes
<i>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.</i>	
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)	7790
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	4440
GRO+DRO (EPA SW-846 Method 8015M)	4186
BTEX (EPA SW-846 Method 8021B or 8260B)	0.2
Benzene (EPA SW-846 Method 8021B or 8260B)	0
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
On what estimated date will the remediation commence	09/09/2024
On what date will (or did) the final sampling or liner inspection occur	02/25/2025
On what date will (or was) the remediation complete(d)	02/25/2025
What is the estimated surface area (in square feet) that will be reclaimed	500
What is the estimated volume (in cubic yards) that will be reclaimed	600
What is the estimated surface area (in square feet) that will be remediated	500
What is the estimated volume (in cubic yards) that will be remediated	600
<i>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.</i>	
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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Santa Fe, NM 87505

QUESTIONS, Page 4

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Remediation Plan (continued)	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
<i>(Select all answers below that apply.)</i>	
(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.
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Socorro Hendry Title: Regulatory Manager Email: socorro.hendry@octane-energy.com Date: 03/31/2025
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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

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Phone: (505) 629-6116

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State of New Mexico
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1220 S. St Francis Dr.
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QUESTIONS, Page 5

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	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

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

General Information
Phone: (505) 629-6116

Online Phone Directory
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State of New Mexico
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1220 S. St Francis Dr.
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QUESTIONS, Page 6

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	433558
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	3
What was the sampling surface area in square feet	500

Remediation Closure Request	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
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	500
What was the total volume (cubic yards) remediated	600
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	500
What was the total volume (in cubic yards) reclaimed	600
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.
<i>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>	
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: 03/31/2025

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, Page 7

Action 447270

QUESTIONS (continued)

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	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

Action 447270

CONDITIONS

Operator: CAMBRIAN MANAGEMENT LTD 310 W Wall Street Ste 300 Midland, TX 79701	OGRID: 198688
	Action Number: 447270
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

CONDITIONS

Created By	Condition	Condition Date
nvez	Remediation closure report is approved. Release resolved. To note, the excavation soils only comes out to 100 cubic yards versus the 600 cubic yards reported. The remaining 500 cubic yards apparently came from the well pad itself and was not mentioned in the report due to issues dealing with the state land office on the reclamation matter for the site.	5/14/2025