Tom Closson #1

Released Volume Calculation

Length 9 feet
Width 8 feet
Thickness 3 in
Gals = 216
BBls = 5.1428571 Est. Total Bbls Released

Volume = L*W*T

Total Released Volume =
216 gallons (US, dry)
5.14 bbls

Revised Site Characterization Report and Remediation Workplan

April 14, 2025

Tom Closson #001
API No. 30-025-08801
Incident No. nAPP2228055393
Lea County, New Mexico

Prepared For:

FAE II Operating, LLC
11757 Katy Freeway, Suite 725
Houston, Texas 77079

Prepared By:

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Cynthia K. Crain, P.G.

Crain Environmental

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APPENDICES

1.0 Introduction

FAE II Operating, LLC (FAE) has retained Crain Environmental (CE) to prepare a Site Characterization Report and Remediation Workplan for the Tom Closson #001 (Site) located in Unit Letter J, Section 6, Township 22 South, Range 36 East, Lea County, New Mexico, at Global Positioning Coordinates (GPS) 32.4199915, -103.3013047. The Site is in an area of oil and gas activity and cattle grazing, and the surface is owned by the United States Bureau of Land Management (BLM). Figure 1 provides a Site Location Map.

2.0 Background

On October 6, 2022, FAE personnel observed a release of produced water from a storage tank inside the tank battery and immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) by telephone. Immediately following the release, the area was secured, and the source of the release (the dump valve) was repaired. The released fluid was mostly contained within the battery but seeped under the firewall approximately 20 feet to the southwest, and approximately 20 feet to the southeast. Produced water impacted a surface area of approximately 18,750 square feet. No fluids were recovered, but saturated soil outside the firewall was excavated and hauled to a New Mexico approved disposal facility.

The NMOCD Form C-141 (Release Notification Report) was received by the New Mexico Oil Conservation Division (OCD) on October 12, 2022, and the Site was assigned Incident Number nAPP2228055393. The Initial C-141 reports a release of 2 barrels (bbls) of oil and 15 bbls of produced water from the water tank on October 6, 2022, with 0 bbls of fluid recovered. The release point and the surface extent of the produced water release are depicted on Figure 2.

On October 20, 2023, January 17, 2024, and April 17, 2024, 90-day extensions for submittal of a Site Characterization Report and Remediation Workplan (Workplan) were approved by the NMOCD, with a final due date of July 16, 2024. After submitting the Workplan to the NMOCD on July 1, 2024, FAE elected to change the remediation procedure from in-situ to a combination of in-situ and ex-situ treatment and requested a 30-day extension to complete the revised document. The NMOCD approved the extension on July 31, 2024, with a due date of August 15, 2024. A copy of the NMOCD correspondence is included in Appendix A.

On February 26, 2024, the BLM conducted a surface inspection at the Site and presented FAE with a Notice of Written Order (Notice). The Notice stated that large amounts of surface contaminants were found on the well pad and surrounding areas and requested that a Workplan detailing removal of surface contaminants be submitted by April 10, 2024. Appendix B provides a copy of the BLM letter.

CE was contacted by FAE on March 18, 2024, and conducted a site inspection on March 20, 2024. During the inspection, CE observed areas of historical hydrocarbon impacts to the surface within the tank battery, to the west and northwest of the battery (extending approximately 100 feet to the northwest), and to the east of the battery (extending approximately 520 feet). Appendix C provides photographic documentation.

On April 9, 2024, a Remediation Workplan was submitted to the BLM via email. The BLM verbally approved the Workplan in a conference call on April 18, 2024. On May 7, 2024, additional site investigation activities (as described in Section 4.6) were conducted by CE, and the results were included in the Site Characterization Report and Remediation Workplan that was submitted to the NMOCD on July 1, 2024.

On August 15, 2024, a Revised Site Characterization Report and Remediation Workplan was submitted to the NMOCD. The revised Workplan provided a change in the remediation procedure from in-situ to a combination of in-situ and ex-situ treatment.

On September 17, 2024, the NMOCD rejected the Workplan for the following reasons:

1. The depth to groundwater has not been adequately determined.
2. Use of microblaze for in-situ purposes is denied.
3. Small Landfarm permit would be required for ex-situ microblaze application.
4. Increase in sampling frequency is not accepted until bullet #1 has been adequately addressed.

After discussions with the NMOCD regarding soil treatment with hydrogen peroxide verses MicroBlaze, this Revised Site Characterization Report and Remediation Workplan is being submitted to propose an alternative method of soil treatment using hydrogen peroxide treatment for remediation of soil related to Incident #nAPP2228055393 and to all historical release areas as described in Section 5.0.

3.0 NMOCD Closure Criteria

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

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

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

3.1 Groundwater Evaluation

A review of the New Mexico Office of the State Engineer (NMOSE) records indicated there is one water well (CP 00469) located within 0.5 mile of the Site, with depth to groundwater recorded at 195' below ground surface (bgs). Well CP 00469 was installed in 1969 and is listed in the table below.

On December 5, 2024, CE measured the depth to groundwater in the well casing of the windmill located 140' northeast of the Site. A water level indicator was inserted into the casing and dropped to a depth of 105' bgs and groundwater was not encountered. Figure 3 provides a 0.5-mile radius circle around the Site and shows the location of CP 00469 and the windmill. Photographic documentation is provided in Appendix C.

Nearby Water Wells

Well ID	Location from Release Site	Year Installed	Use	Depth to Water (feet bgs)
CP 00469	Approx. 0.3 mile to northwest	1969	N/A	195

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 3, 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. The nearest playa lake is located 1.24 miles southwest of the Site.
- Within 300 feet from an occupied permanent residence, school, hospital, institution or church.
  - The Site Location Map (Figure 1) and information available from the Lea County, New Mexico Central Appraisal District do not show or list any permanent residence, school, hospital, institution or church located within 300 feet of the Site.
- Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes.
  - No wells or springs located within 500 feet of the Site appear in any of the NMOSE records reviewed by CE.
- Within 1,000 feet of any fresh water well or spring.

- No fresh water wells or springs located within 1,000 feet of the Site appear in any of the records reviewed by CE.

- Within incorporated municipal boundaries or within a defined municipal fresh water well field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended.
  - Based on the property and other records review by CE, the Site is not located in incorporated municipal boundaries or within a defined municipal fresh water well field.
- Within the area overlying a subsurface mine.
  - Based on the property and other records reviewed by CE, the Site is not located within an area overlying a subsurface mine.
  -

3.3 Wetlands, Floodplain, and Karst Geology

A review of the United States Fish and Wildlife Service (USFWS) wetlands map indicated the Site is not located within 300 feet of a wetland. The nearest freshwater emergent wetland is located 1.24 miles southwest 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 in an area of undetermined flood hazard and is assumed to be located outside of a 100-year floodplain. Figures 4, 5, and 6 depict the USFWS wetlands map, FEMA floodplain information, and the karst potential data, respectively.

3.4 Closure Criteria Applicable to the Site

Based on the depth to groundwater at the windmill located 140’ northeast of the Site being greater than 105’ bgs, the least stringent NMOCD Closure Criteria will apply to soil deeper than 4’ bgs. The most stringent Closure Criteria will be applicable to soil from the surface to a depth of 4’ 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.

4.2 Depth to Groundwater

As discussed in Section 3.1, groundwater was not encountered to a depth of 105' bgs in the windmill located 140' northeast of the Site.

4.3 Wellhead Protection Area

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

4.4 Distance to Nearest Significant Watercourse

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

4.5 Summary of 2005 Soil Investigation

Historical research showed that FAE purchased the Site from Mammoth Exploration, LLC (Mammoth) on January 27, 2022. Mammoth purchased the Site from Saber Oil and Gas Ventures, LLC (Saber) on September 1, 2008, and Saber purchased the Site from Guadalupe Operating, LLP (Guadalupe) on February 1, 2004.

On March 22, 2005, July 26, 2005, and November 30, 2005, Guadalupe conducted soil investigations at the Tom Closson #001 tank battery and the area east of the tank battery. Soil samples were collected from 14 locations across the Site by Allstate Environmental Services, LLC (Allstate). Summaries of the investigation activities were submitted to the NMOCD on April 18, 2005, and December 5, 2005.

Appendix D provides a copy of a Cleanup Plan (Plan) that was submitted to the NMOCD on April 18, 2005, and a revised Plan that was submitted to the NMOCD on December 5, 2005. The Plan(s) provides figures showing the sample locations, tables that summarize the laboratory results, and copies of the laboratory reports. Referring to data in the Plan(s), Total Petroleum Hydrocarbons (TPH) are shown as the only constituent of concern, and chloride concentrations in all samples were reported below the NMOCD Closure Criteria. As soil remediation described in the letter dated December 5, 2005, was not conducted, the following remediation activities were proposed to the BLM and were conducted on May 7, 2024.

4.6 Summary of May 2024 Analytical Results

On May 7, 2024, soil samples were collected from locations previously sampled by Allstate (sample points 1 [SB-1], 8 [SB-6], 9 [SB-4], 11 [SB-5], and BH-3 [SB-3]) at a depth of 1 foot below ground surface (bgs) to determine if concentrations of TPH and chlorides are similar to concentrations reported in the 2005 Allstate document. Additional soil samples were collected from the sample designated as SB-2 (at depths of 1', 3', and 4.1' bgs), and from sample locations 1 (SB-1) and BH-3 (SB-3) at depths of 3', and 4.1' bgs. All samples were placed in clean glass samples jars, properly labeled, immediately placed on ice, and hand delivered to Eurofins Environment Testing (Eurofins) for analysis of TPH and chlorides. Soil samples collected at depths of 1' and 3' bgs from sample points 1 (SB-1), SB-2, and BH-3 (SB-3), were also analyzed for benzene, toluene, ethylbenzene, and xylenes (BTEX), along with the sample from SB-2 at a depth of 4.1' bgs. Table 1 provides a summary of the laboratory results. Figure 2 shows the sample locations. Photographic documentation is provided in Appendix C. The laboratory report and chain of custody documentation is provided in Appendix E.

Referring to Table 1, concentrations of BTEX and chlorides were reported below the test method detection limits or Closure Criteria in all samples. Concentrations of TPH were vertically delineated in samples collected within the area of Incident #nAPP2228055393 (SB-1, SB-2, and SB-3), and at sample point SB-5. Vertical delineation of TPH was not achieved at sample points SB-4 and SB-6; however, current concentrations at sample points SB-1 (Allstate 1), SB-3 (Allstate BH-3), SB-4 (Allstate 9), SB-5 (Allstate 11), and SB-6 (Allstate 8) were reported less than concentrations recorded in the 2005 Allstate document.

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

4.7 Laboratory Analytical Data Quality Assurance/Quality Control Results

Data reported in the laboratory report 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 as Appendix E.

5.0 Proposed Remediation Workplan

5.1 Proposed Remedial Activities

FAE proposes to remove the tanks, piping, and all ancillary equipment from the tank battery and conduct ex-situ remediation of all affected soil in the area shown on Figure 2. It is estimated that approximately 75,000 cubic yards (cy) of soil will be remediated, and remediation of the area will be conducted in 6 separate sections. The size of each section is estimated and may be adjusted as remediation proceeds.

As TPH has been verified to be the only constituent of concern at the Site, FAE proposes to conduct soil remediation by soil shredding methods, treating soil with hydrogen peroxide as soil is processed through the shredder.

As the area covers approximately 3.5 acres, remediation will be conducted in sections (as shown on Figure 2). Beginning at the east edge of the remediation area, impacted soil will be excavated by section until bottom and sidewall samples of that section report TPH and chloride concentrations below the Closure Criteria.

Following excavation of each section, samples will be collected from the base and sidewalls of the excavation and delivered to Eurofins for analysis of TPH by EPA Method 8015M and chlorides by EPA Method 300.0. Excavation will continue if TPH or chloride concentrations are reported above the Closure Criteria. As initial BTEX concentrations were below the test method detection limits or Closure Criteria, each confirmation sample will only be analyzed for TPH and chlorides. Pursuant to 19.15.29.12(D) NMAC, confirmation samples will consist of five-point composite samples, and discrete grab samples will be collected from any wet or discolored areas.

As soil is excavated, it will be processed through the soil shredder. A solution of 6% hydrogen peroxide will be applied to the soil as it runs through the shredder. Shredded soil will be placed on plastic beside the excavation and allowed to stabilize for a period of at least 24 to 48 hours prior to sample collection.

Following treatment and stabilization, samples will be collected from the treated soil at a rate of 1 sample per 100 cy of soil. All samples will be analyzed for TPH and chlorides only. If the laboratory reports TPH or chloride concentrations above the Closure Criteria, the soil will be processed through the shredder again, while applying an additional solution of 6% hydrogen peroxide. Upon receipt of laboratory results that all TPH and chloride concentrations from the treated soil and the excavation base and sidewalls are below the Closure Criteria, the excavation will be backfilled to surface grade with the treated soil, and excavation will proceed to the next section.

Due to the large footprint of the Site (approximately 3.5 acres), FAE requests a variance from the one soil sample per 200 square foot requirement for confirmation sampling. FAE requests composite confirmation sample collection be performed for each 400 square feet of excavation floor and each 30 linear feet of excavation sidewall. Each confirmation sample will be analyzed only for TPH by EPA Method 8015M. Sample notification will be provided to the NMOCD via the portal at least 2 days prior to sample collection(s).

Pursuant to 19.15.29.13 NMAC, all impacted surface areas will be restored to pre-release conditions. Upon completion of remediation in all sections, surface grading will be performed to near original conditions and contoured to prevent erosion and ponding, promote stability, and preserve storm water flow patterns. Upon completion of contouring, a high-nitrogen fertilizer will be tilled into the upper 1’ of soil to promote plant growth.

During the next favorable growing season following completion of remediation, seeding of all remediated areas will be conducted. Seed will be introduced by seed drill method using the BLM Seed Mix #2 (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.

Given the size of the affected area and the cost of remediation, FAE respectfully requests a remediation schedule of 2 years from the date of NMOCD approval of this *Site Characterization Report and Remediation Workplan* to complete the proposed remediation activities and submit a *Remediation Summary and Closure Report* for NMOCD and BLM approval. The closure report will summarize remedial activities and confirmation sampling results and will include the final Form C-141.

5.2 Schedule of Implementation

FAE is prepared to begin remediation activities within 30 days of NMOCD approval of this Workplan, and the NMOCD and BLM will be notified at least 2 business days prior to the start of remediation activities.

The NMOCD and BLM will be provided with a project update following completion of remediation at each section.

A Closure Report for Incident #nAPP2228055393 and surrounding historical areas will be submitted to the NMOCD and BLM following completion of all proposed remediation activities.

6.0 Distribution

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

Copy 2: Billy Moore
FAE II Operating, LLC
11757 Katy Freeway, Suite 725
Houston, Texas 77079

Copy 3: Crisha A. Morgan
Bureau of Land Management – Carlsbad Field Office
620 East Greene Street
Carlsbad, New Mexico 88220

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TABLE

TABLE 1
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS
FAE II OPERATING, LLC
TOM CLOSSON #001
NMOCD INCIDENT # nAPP2228055393

Sample ID	Sample Date	Sample Depth (bgs)	Soil Status	TPH (GRO)	TPH (DRO)	TPH (MRO)	Total TPH	Benzene	Toluene	Ethylbenzene	Total Xylenes	Total BTEX	Chloride
				milligrams per kilogram (mg/kg)									
NMOCD Closure Criteria							**100**	**10**	**-**	**-**	**-**	**50**	**600**
NMOCD Closure Criteria (>4' bgs)				**GRO + DRO = 1,000**		**-**	**2,500**	**10**	**-**	**-**	**-**	**50**	**20,000**
SB-1 (1')	05/07/24	1'	In Situ	<500	**8,120**	**1,600**	**9,720**	<0.0996	<0.0996	<0.0996	<0.199	<0.199	**534**
SB-1 (3')	05/07/24	3'	In Situ	**60.5**	**1,970**	<50.0	**2,030**	<0.0401	**0.0683 +*1**	**0.132 +*1**	**0.449 +*1**	**0.649**	**289**
SB-1 (4.1')	05/07/24	4.1'	In Situ	<49.6	<49.6	<49.6	<49.6	--	--	--	--	--	**227**
SB-2 (1')	05/07/24	1'	In Situ	<994	**7,710**	<994	**7,710**	<0.398	**0.101 +*1**	**1.05 + *1**	**5.24 + *1**	**6.39**	**175**
SB-2 (3')	05/07/24	3'	In Situ	<498	<498	<498	<498	**0.212 +*1**	**0.0914 +*1**	**0.0526 +*1**	**0.807 +*1**	**1.16**	**21.8**
SB-2 (4.1')	05/07/24	4.1'	In Situ	<49.9	<49.9	<49.9	<49.9	<0.00200	<0.00200	<0.00200	<0.00401	<0.00401	**493**
SB-3 (1')	05/07/24	1'	In Situ	<996	**1,850**	<996	**1,850**	<0.0399	**0.180 +*1**	**1.33 +*1**	**6.56 +*1**	**8.07**	**30.4**
SB-3 (3')	05/07/24	3'	In Situ	<999	**2,950**	<999	**2,950**	<0.0398	**0.275 +*1**	**0.681 +*1**	**5.23 +*1**	**6.19**	**24.1**
SB-3 (4.1')	05/07/24	4.1'	In Situ	<49.9	<49.9	<49.9	<49.9	--	--	--	--	--	**14.0**
SB-4 (1')	05/07/24	1'	In Situ	<990	**4,040**	<990	**4,040**	--	--	--	--	--	<4.97
SB-4 (4.1')	05/07/24	4.1'	In Situ	<249	**5,320**	<249	**5,320**	--	--	--	--	--	--
SB-5 (1')	05/07/24	1'	In Situ	<999	**3,690**	<999	**3,690**	--	--	--	--	--	<5.03
SB-5 (4.1')	05/07/24	4.1'	In Situ	<49.8	**183**	<49.8	**183**	--	--	--	--	--	--
SB-6 (1')	05/07/24	1'	In Situ	<995	**5,910**	<995	**5,910**	--	--	--	--	--	<4.99
SB-6 (4.1')	05/07/24	4.1'	In Situ	<49.7	**1,880**	<49.7	**1,880**	--	--	--	--	--	--
SB-6 (6.5')	05/07/24	6.5'	In Situ	<249	**3,710**	<249	**3,710**	--	--	--	--	--	--
SB-6 (9')	05/07/24	9'	In Situ	<250	**6,740**	<250	**6,740**	--	--	--	--	--	--

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. +: LCS and/or LCSD is outside acceptance limits, high biased.
10. *1: LCS/LCSD RPD exceeds control limits.
11. --: The sample was not analyzed for the consituent.

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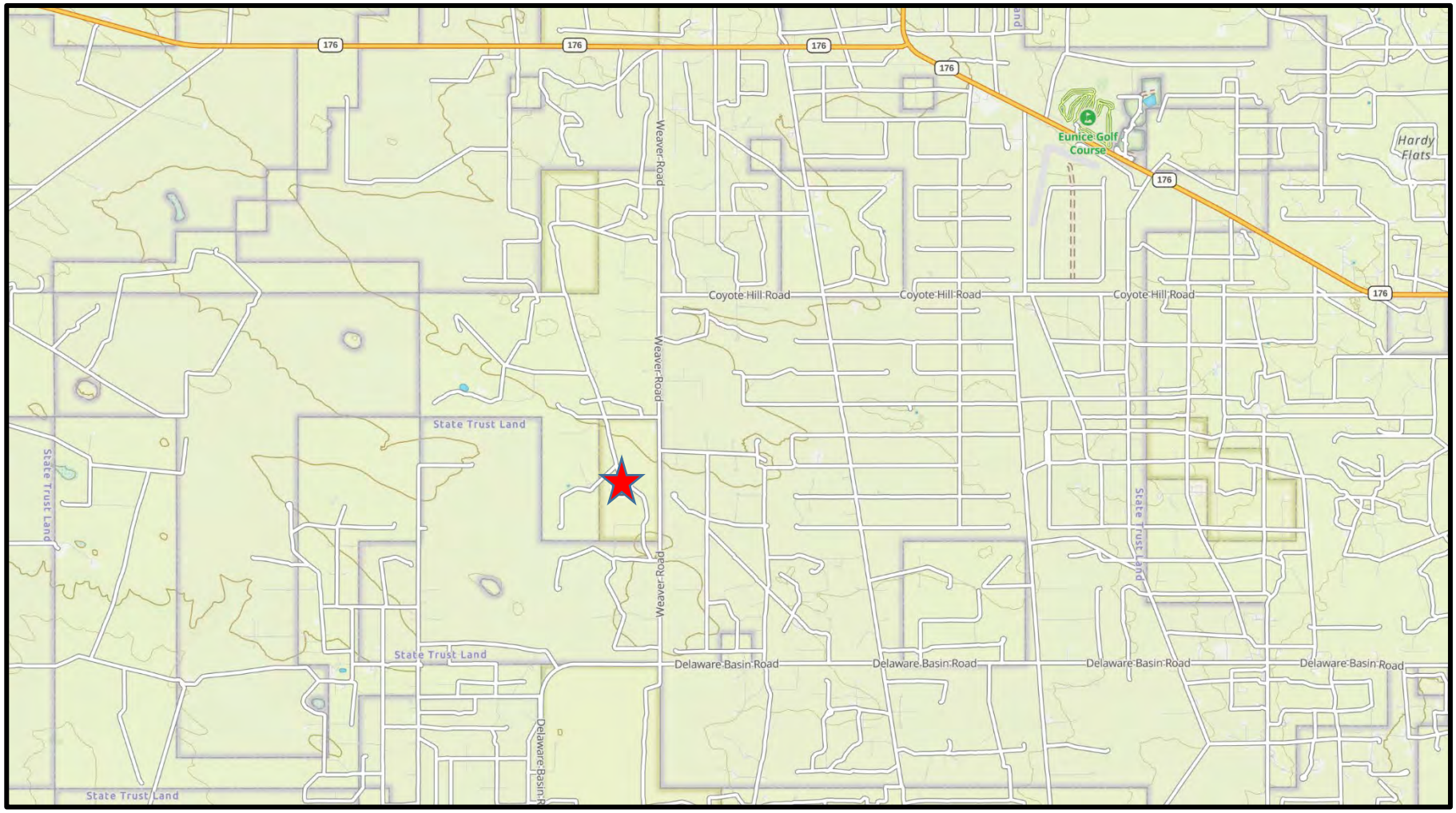
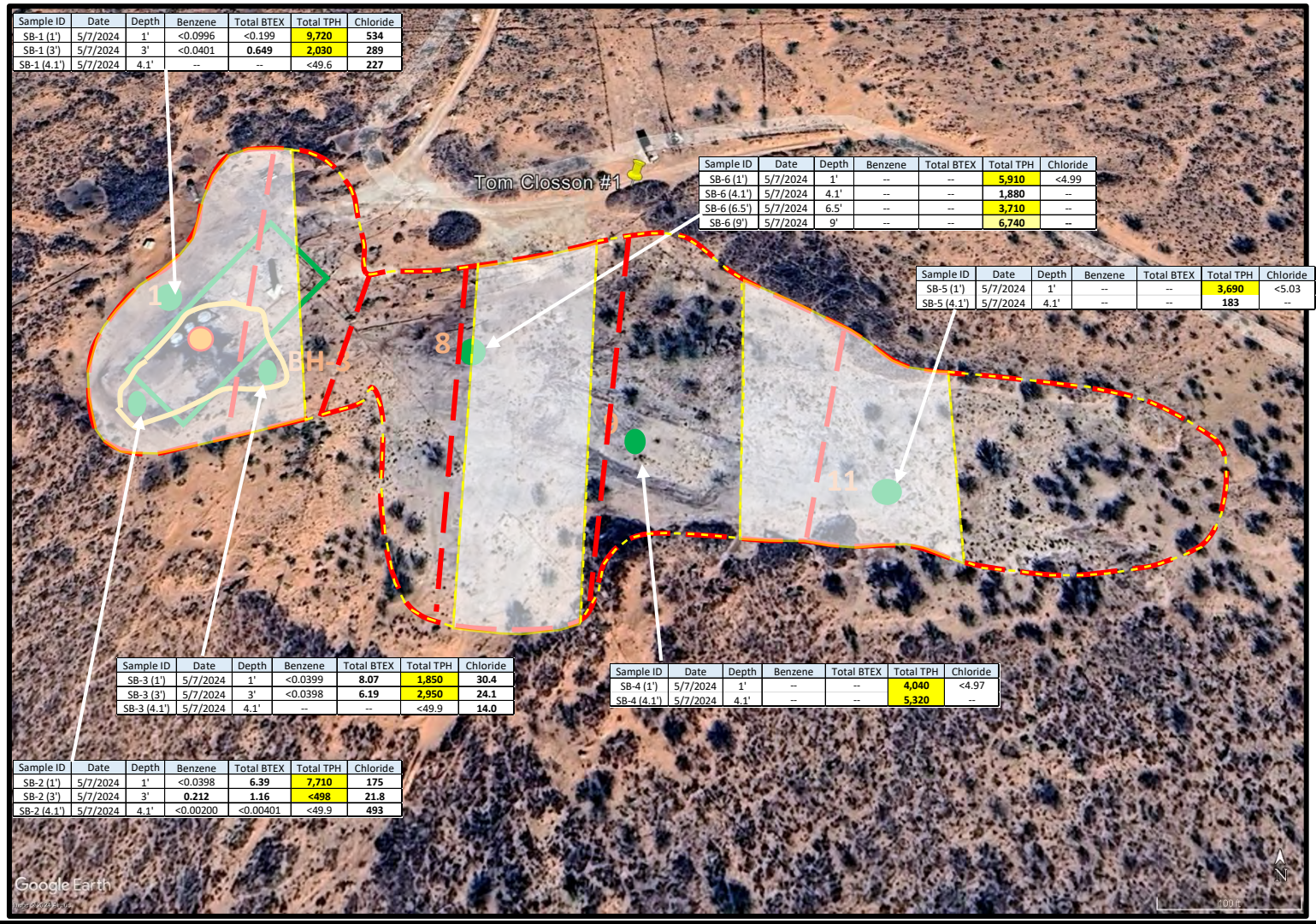
FIGURES



LEGEND: Site Location Base Map From GAIA GPS	**Figure 1** **Site Location Map** FAE II Operating, LLC Tom Closson #001 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: April 3, 2024 GPS: 32.4199915° -103.3013047°



Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-1 (1')	5/7/2024	1'	<0.0996	<0.199	**9,720**	**534**
SB-1 (3')	5/7/2024	3'	<0.0401	**0.649**	**2,030**	**289**
SB-1 (4.1')	5/7/2024	4.1'	--	--	<49.6	**227**

Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-6 (1')	5/7/2024	1'	--	--	**5,910**	<4.99
SB-6 (4.1')	5/7/2024	4.1'	--	--	**1,880**	--
SB-6 (6.5')	5/7/2024	6.5'	--	--	**3,710**	--
SB-6 (9')	5/7/2024	9'	--	--	**6,740**	--

Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-5 (1')	5/7/2024	1'	--	--	**3,690**	<5.03
SB-5 (4.1')	5/7/2024	4.1'	--	--	**183**	--

Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-3 (1')	5/7/2024	1'	<0.0399	**8.07**	**1,850**	**30.4**
SB-3 (3')	5/7/2024	3'	<0.0398	**6.19**	**2,950**	**24.1**
SB-3 (4.1')	5/7/2024	4.1'	--	--	<49.9	**14.0**

Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-4 (1')	5/7/2024	1'	--	--	**4,040**	<4.97
SB-4 (4.1')	5/7/2024	4.1'	--	--	**5,320**	--

Sample ID	Date	Depth	Benzene	Total BTEX	Total TPH	Chloride
SB-2 (1')	5/7/2024	1'	<0.0398	**6.39**	**7,710**	**175**
SB-2 (3')	5/7/2024	3'	**0.212**	**1.16**	**<498**	**21.8**
SB-2 (4.1')	5/7/2024	4.1'	<0.00200	<0.00401	<49.9	**493**

LEGEND:

- Release Point for Incident nAPP2228055393
- Tank Battery Boundary
- 1 Sample Location with Concentrations and Allstate Sample Number
- Approximate Proposed Remediation Boundary With Sections
- Incident nAPP2228055393 Release Path

Figure 2

Site Map With Sample Locations

FAE II Operating, LLC

Tom Closson #001

Lea County, New Mexico

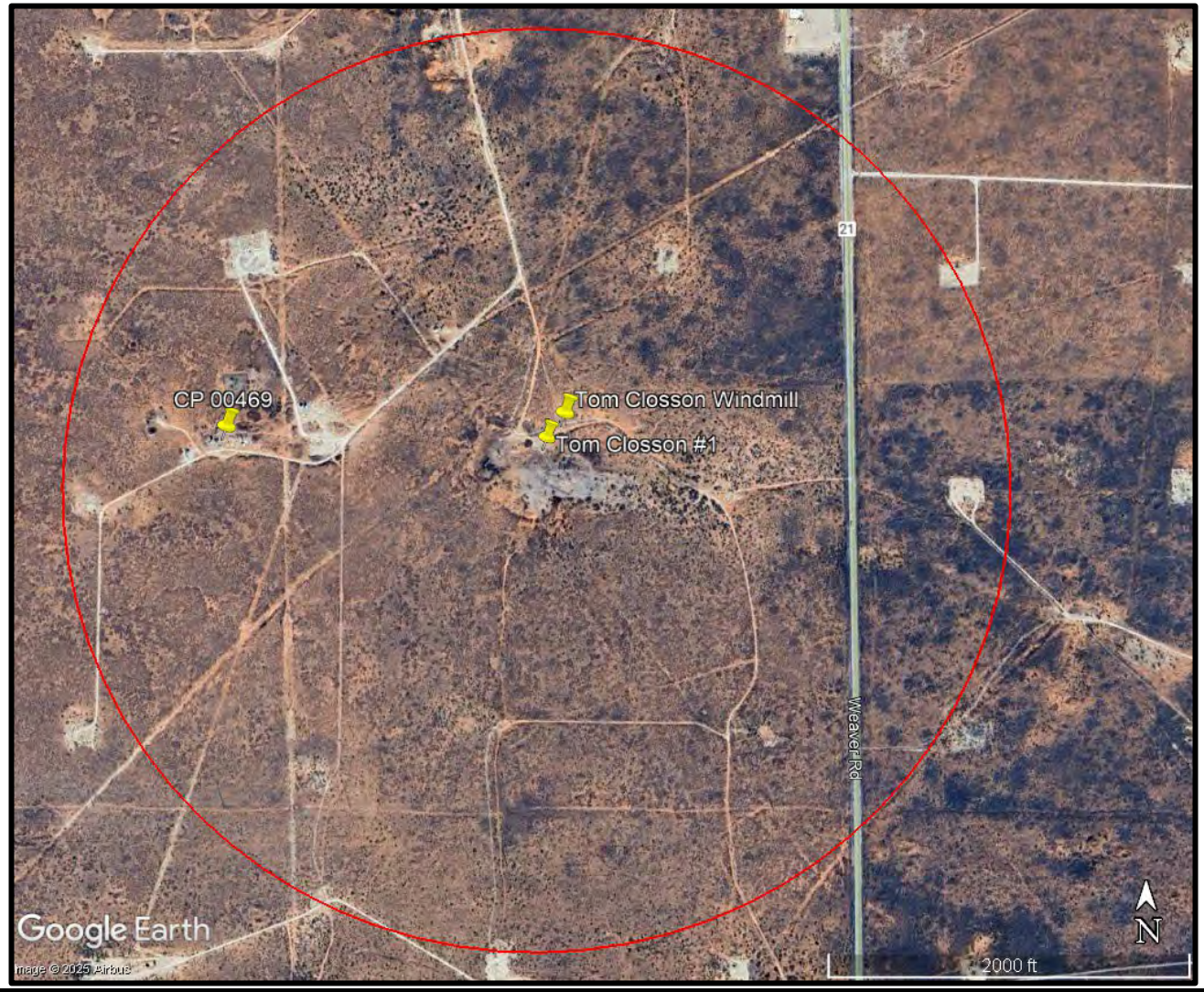
Drafted by: CC | Checked by: CC

Draft: August 10, 2024

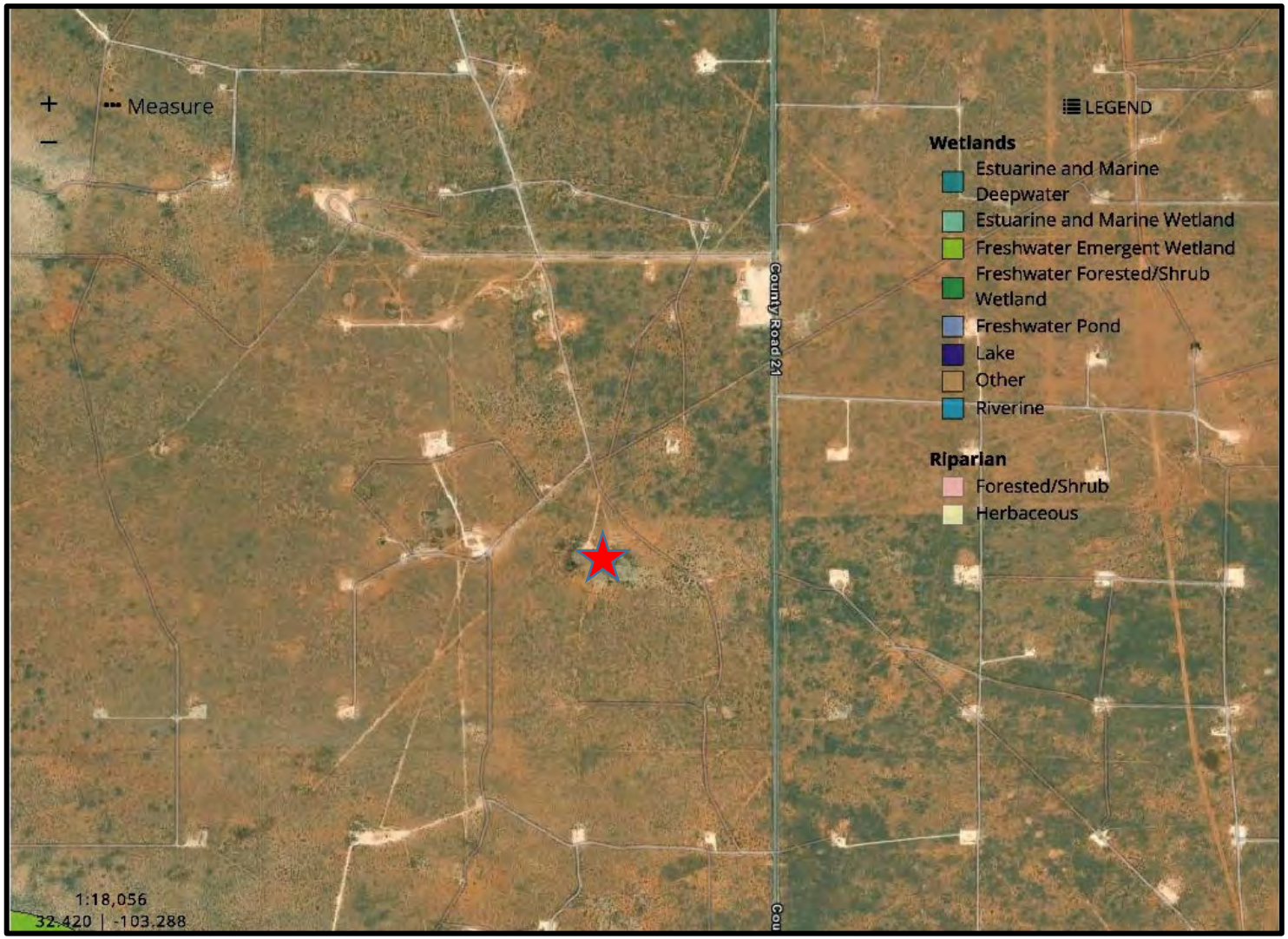
GPS: 32.4199915° -103.3013047°

Base Map From GoogleEarth Pro

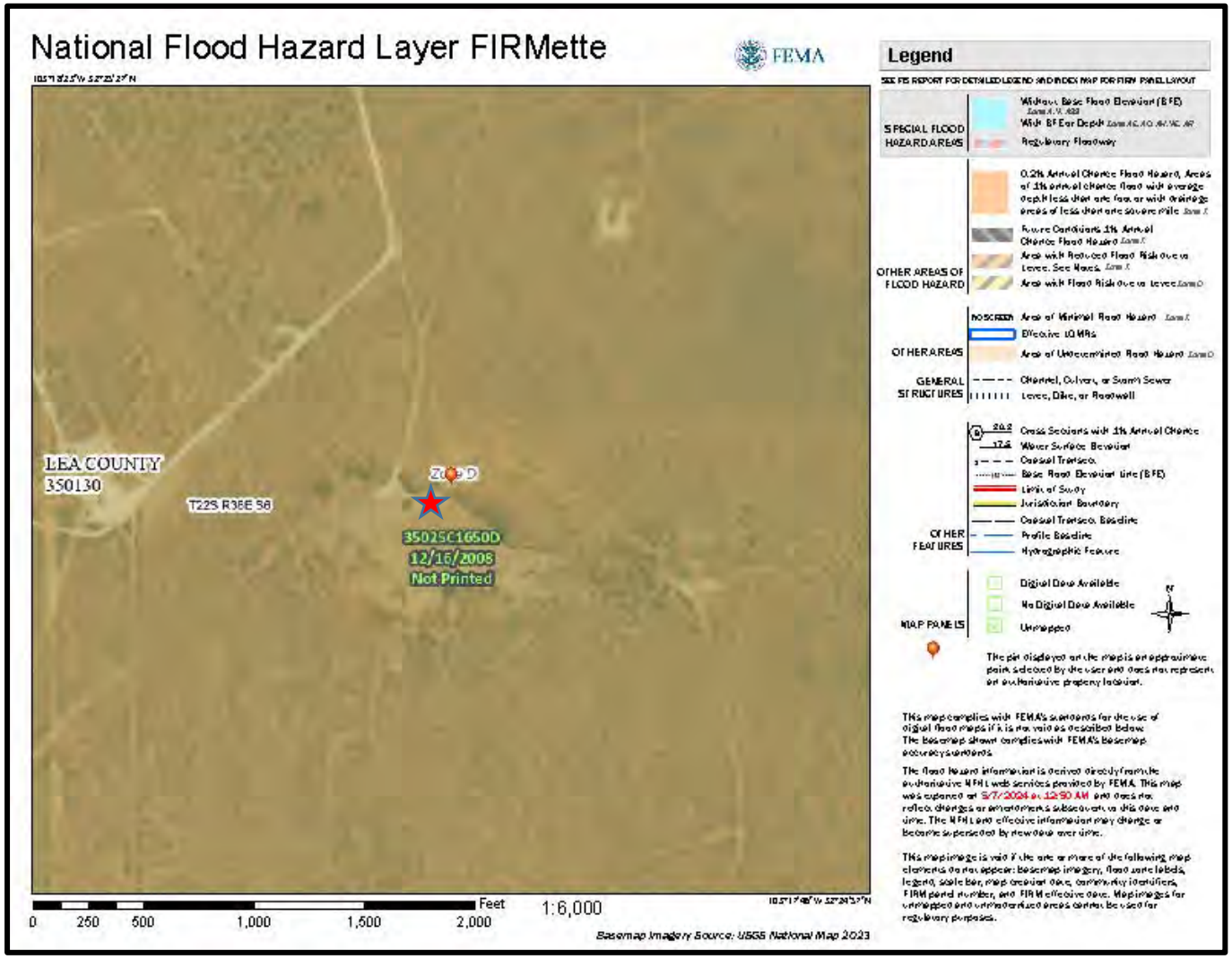
Grain Environmental



LEGEND: Site and Well Location Base Map From Google Earth Pro	**Figure 3** **Wellhead Protection Area Map** FAE II Operating, LLC Tom Closson #001 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: April 12, 2025 GPS: 32.4199915° -103.3013047°	Grain Environmental



LEGEND: Site Location Base Map From USFW.gov	**Figure 4** **National Wetlands Inventory Map** FAE II Operating, LLC Tom Closson #001 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: April 12, 2025 GPS: 32.4199915° -103.3013047°



LEGEND:

Site Location

Base Map From FEMA.gov

Figure 5

FEMA Floodplain Map

FAE II Operating, LLC

Tom Closson #001

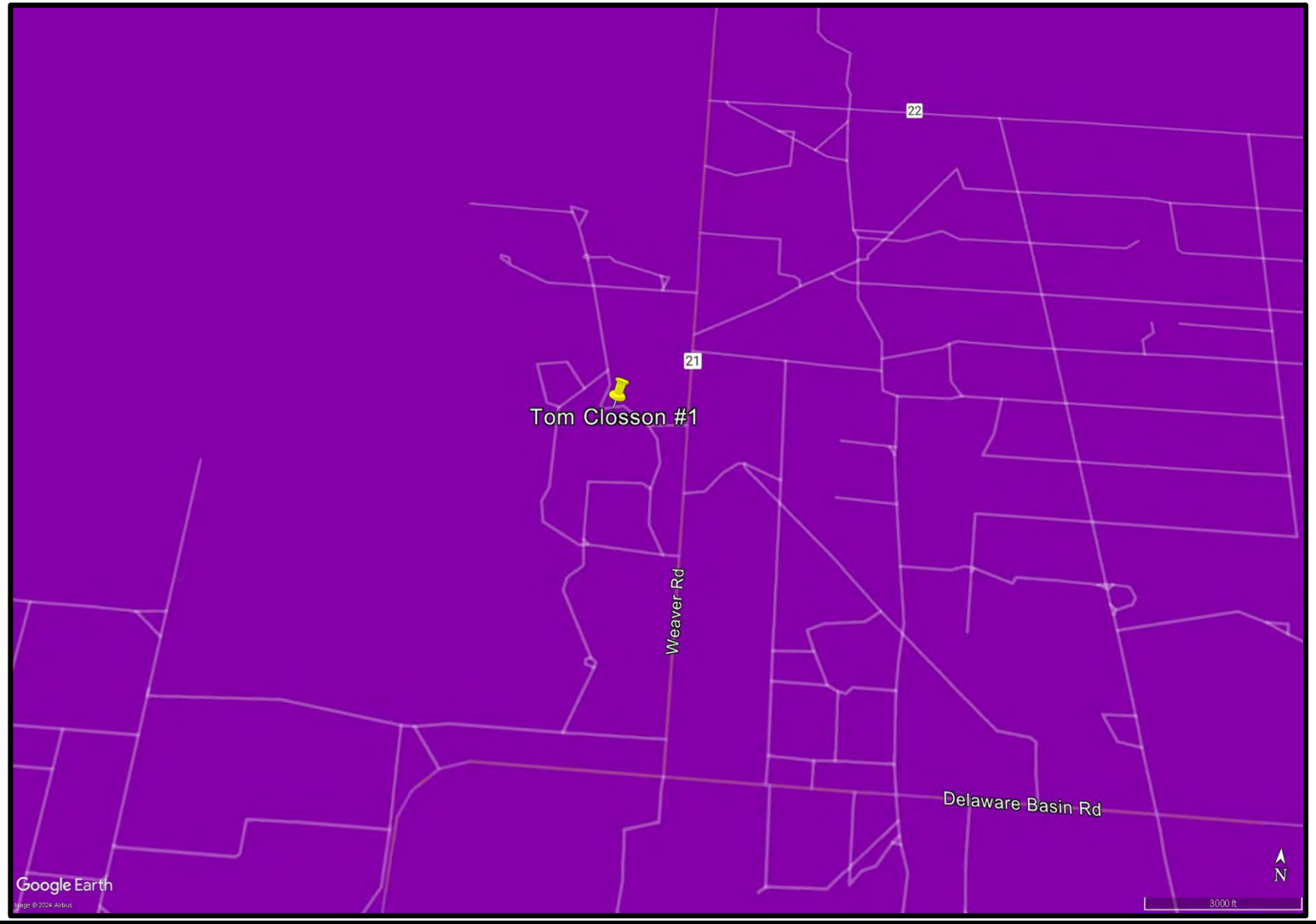
Lea County, New Mexico

Drafted by: CC | Checked by: CC

Draft: June 15, 2024

GPS: 32.4199915° -103.3013047°

Grain Environmental



LEGEND: Low Karst Potential Medium Karst Potential High Karst Potential Base Map From Google Earth Pro and BLM.gov	**Figure 6** **Karst Potential Map** FAE II Operating, LLC Tom Closson #001 Lea County, New Mexico	Drafted by: CC | Checked by: CC Draft: April 12, 2025 GPS: 32.4199915° -103.3013047°

APPENDIX A

NMOCD COMMUNICATION

From: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Sent: Wednesday, April 17, 2024 2:34 PM
To: Alex Bolanos <alex@faenergyus.com>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: Re: [EXTERNAL] FAE II Operating C-141 Extension Request

Alex,

Thanks for the correspondence. All six (6) incidents have had two (2) extensions granted. This will be the last time extension approved for 90-days (July 16, 2024).

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

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

Regards,

Nelson Velez • Environmental Specialist - Adv

Environmental Bureau | EMNRD - Oil Conservation Division

1000 Rio Brazos Road | Aztec, NM 87410

(505) 469-6146 | nelson.velez@emnrd.nm.gov

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

From: Alex Bolanos <alex@faenergyus.com>
Sent: Tuesday, April 16, 2024 10:44 AM

To: Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>
Subject: [EXTERNAL] FAE II Operating C-141 Extension Request

Nelson,

FAE II Operating, requests a 90-day extension for the following releases:

1. Arnott Ramsay NCT-B Battery–Incident No.: nAPP2304957943
   - Initial delineation sampling has been completed. Currently awaiting on proposed work plan.

2. Farnsworth 4 #007 / SWD–Incident No.: nAPP2225654053
   - Initial delineation sampling has been completed. Currently awaiting on proposed work plan.

3. Tom Closson Battery –Incident No.: nAPP2228055393
   - FAE II needs to provide correct Liner Inspection notice and give time for liner inspection. Closure report awaiting proper liner inspection notice.

4. Tom Closson Battery (new-2023) – Incident No.: nAPP2317251245
   - Environmental company still working on characterization. Delayed due to work in other area.

5. Eva Blineberry #20 – Incident No.: nAPP2321657306
   - FAE II Moving on location this week to excavate.

6. Teague Injection Station – Incident No.: nAPP2320959193
   - FAE II is about to backfill this location. We had to wait on topsoil from surface owner.

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

Thanks, Nelson.

Alex Bolanos
(832) 689-3788

No. NAPP2228055393_Tom Closson #001

Inbox

Alex Bolanos Wed, Jul 31, 10:58 AM (1 day ago)
to Nelson,, Billy, me

Nelson,

FAE II Operating is currently working on revising the site characterization and remediation work plan for the above mentioned release. We will have that revision together shortly.

We would like to request a 30-day extension to revise the site characterization and remediation work plan.

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

Velez, Nelson, EMNRD Wed, Jul 31, 11:03 AM (1 day ago)
to Alex, Billy, me

Good morning Alex,

Your time extension request is approved. Remediation Due date has been updated to August 15, 2024.

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

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

Regards,

Nelson Velez ● Environmental Specialist - Adv
Environmental Bureau | EMNRD - Oil Conservation Division
1000 Rio Brazos Road | Aztec, NM 87410
(505) 469-6146 | nelson.velez@emnrd.nm.gov
http://www.emnrd.nm.gov/ocd

Gmail

Cindy Crain <cindy.crain@gmail.com>

The Oil Conservation Division (OCD) has rejected the application, Application ID: 359860

4 messages

OCDOnline@state.nm.us <OCDOnline@state.nm.us> Tue, Sep 17, 2024 at 3:32 PM
To: cindy.crain@gmail.com

To whom it may concern (c/o Cindy Crain for FAE II Operating LLC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2228055393,
for the following reasons:

- **1. The depth to groundwater has not been adequately determined. When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided in the submission. The responsible party may choose to remediate to the most stringent levels listed in Table 1 of 19.15.29 NMAC in lieu of drilling to determine the depth to groundwater. 2. Use of microblaze for in-situ purposes is denied. 3. Small landfarm permit per 19.15.36.16 NMAC would be required as it pertains to ex-situ microblaze application. Please refer to the definition of small landfarm per 19.15.36.7A (5) NMAC for size restrictions. 4. Increase in sampling frequency is not accepted until bullet #1 has been adequately addressed. 5. FAE has 90-days (December 16, 2024) to submit to OCD its appropriate or final remediation closure report.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 359860.
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,
Nelson Velez
Environmental Specialist - Advanced
505-469-6146
Nelson.Velez@emnrd.nm.gov

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

Cindy Crain <cindy.crain@gmail.com> Mon, Sep 23, 2024 at 5:03 PM
To: Billy Moore <billy@faenergyus.com>
Cc: Alex Bolanos <alex@faenergyus.com>

Hi Billy,

Please see below for OCD denial of the Tom Closson #1 Workplan. As we discussed on the phone, we will check to see if water well CP 00469 (32.420014, -103.307332) is available to measure down to at least 100', and a Revised Workplan including the depth to water information and use of hydrogen peroxide versus MicroBlaze will be submitted to the OCD by the December 16, 2024 deadline.

A map showing the location for CP 00469 is attached.

Please let me know if you have any questions.

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

Water well map.jpg
2270K

Billy Moore <billy@faenergyus.com> Tue, Sep 24, 2024 at 9:01 AM
To: Cindy Crain <cindy.crain@gmail.com>

Cindy – there is an active water well there.

[Quoted text hidden]

Cindy Crain <cindy.crain@gmail.com> Tue, Jan 28, 2025 at 2:29 PM
To: Billy Moore <billy@faenergyus.com>

Billy,

As I mentioned to you the other day, estimated costs for remediation using ex-situ hydrogen peroxide treatment are more than the estimate I previously provided you for a combination of in-situ/ex-situ treatment using MicroBlaze.

Ponderosa has estimated their costs for excavation, treatment, and backfill on a 6,000 cubic yard (cy) basis. I have added in costs for Crain Environmental oversight, sample collection, and OCD communication, etc., and laboratory costs (to be paid by FAE).

The total estimated cost to **treat 6,000 cy is $323,000**. Based on a 6,000 cy treatment area, the entire area of remediation is broken down into 6.5 sections, for a **Total estimated cost of $2,100,000**.
Attached please find a map that shows the breakdown of the separate sections.

Please let me know if you have any questions, or if you would like me to go ahead and prepare the revised Remediation Workplan to include the use of hydrogen peroxide for remediation (spread over a 5-year period).

Thank you,
Cindy Crain
[Quoted text hidden]

Fig 7_1.28.25 Treatment Areas.pdf
636K

Grain Environmental

APPENDIX B

BUREAU OF LAND MANAGEMENT NOTICE OF WRITTEN ORDER

Form 3160-18
(November 2019)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

NOTICE OF WRITTEN ORDER

Number 24JJJ0009W
Page 1 of 3

☑ Certified Mail-Return Receipt Requested	9589071052700175550369
☐ Hand Delivered, Received By and Date	

Identification	
Lease	NMLC030132A
Agreement	

Bureau of Land Management Office Carlsbad Field Office		Operator or Third Party FAE II OPERATING LLC
Address 620 E. Greene St. Carlsbad. NM 88220		Address 11757 Katy Freeway, Suite 725 Houston, TX 77079
Telephone 5752346252	Inspector JADEN JOHNSTON	Attention
Site Name TOM CLOSSON	Well/Facility/FMP/Identification# 01	Legal Land Description (Include Lat./Long.) NWSE, 6-22S-36E (32.4199915/-103.3013047)
Site Name	Well/Facility/FMP/Identification#	Legal Land Description (Include Lat./Long.)
Site Name	Well/Facility/FMP/Identification#	Legal Land Description (Include Lat./Long.)

THE FOLLOWING ISSUE(S) WERE FOUND BY BUREAU OF LAND MANAGEMENT INSPECTORS ON THE DATE AND AT THE SITE(S) LISTED.

Date	Time (24-hour Clock)	Corrective Action to be Completed By	Date Corrected	Authority Reference
02/26/2024	10:00	04/10/2024		43CFR3162.1(a)

Remarks:

Problem: During a surface inspection on 2/26/2024, found large amounts of surface contaminants on the well pad and surrounding areas.

Corrective Action: The operator will need to submit a workplan document detailing how they plan on removing surface contaminants. The workplan will need to be submitted via email or mail by no later than 4/10/2024. Email pictures of completed work to Environmental Surface Protection Specialist Intern Jaden Johnston and contact with any questions or concerns.

Cell Phone: 575-988-1787
Desk Phone: 575-234-6252
Email: jjjohnston@blm.gov

When the Written Order is complied with, sign this notice and return to above address.

Company Representative Signature: _____ Print Name: _____ Date: _____

Company Comments:

(Continued on Page 2)

In accordance with 43 CFR 3163.1(a), you must comply with the corrective actions for the identified issue(s) by the abatement date provided above. If you fail to comply within the time frames specified, you will be issued an Incident of Noncompliance (INC) in accordance with 43 CFR 3163.1(a), which may include an assessment or additional enforcement actions as deemed necessary to gain compliance.

WARNING

The Authorized Officer has authority to issue a Written Order in accordance with 43 CFR 3161.2. Per 43 CFR 3165.3, Written Order and reporting time frames begin upon receipt of the Notice, or seven business days after the date it is mailed, whichever is earlier. Each issue must be corrected by the "Action to be Completed By" date identified above. This form must be signed, dated, and postmarked no later than the next business day after the prescribed timeframe for correction and returned to the Bureau of Land Management office at the address shown above.

Section 109(d)(1) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at 43 CFR 3163.2(f)(1), provides that any person who "knowingly or willfully" prepares, maintains, or submits false, inaccurate, or misleading reports, notices, affidavits, records, data, or other written information required by this part shall be liable for a civil penalty per violation for each day such violation continues.

REVIEW AND APPEAL RIGHTS

A person contesting an Order of the Authorized Officer or violation must request a State Director Review of the Written Order or Incident of Noncompliance. This request must be filed within 20 business days of receipt of the Written Order with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, MS 300-QC, Arlington, Virginia 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

Signature of Bureau of Land Management Authorized Officer	Date	Time (24-hour Clock)
CRISHA MORGAN Digitally signed by CRISHA MORGAN Date: 2024.03.12 10:39:12 -06'00'	03/12/2024	1038

Remarks:

Problem: During a surface inspection on 2/26/2024, found large amounts of surface contaminants on the well pad and surrounding areas.

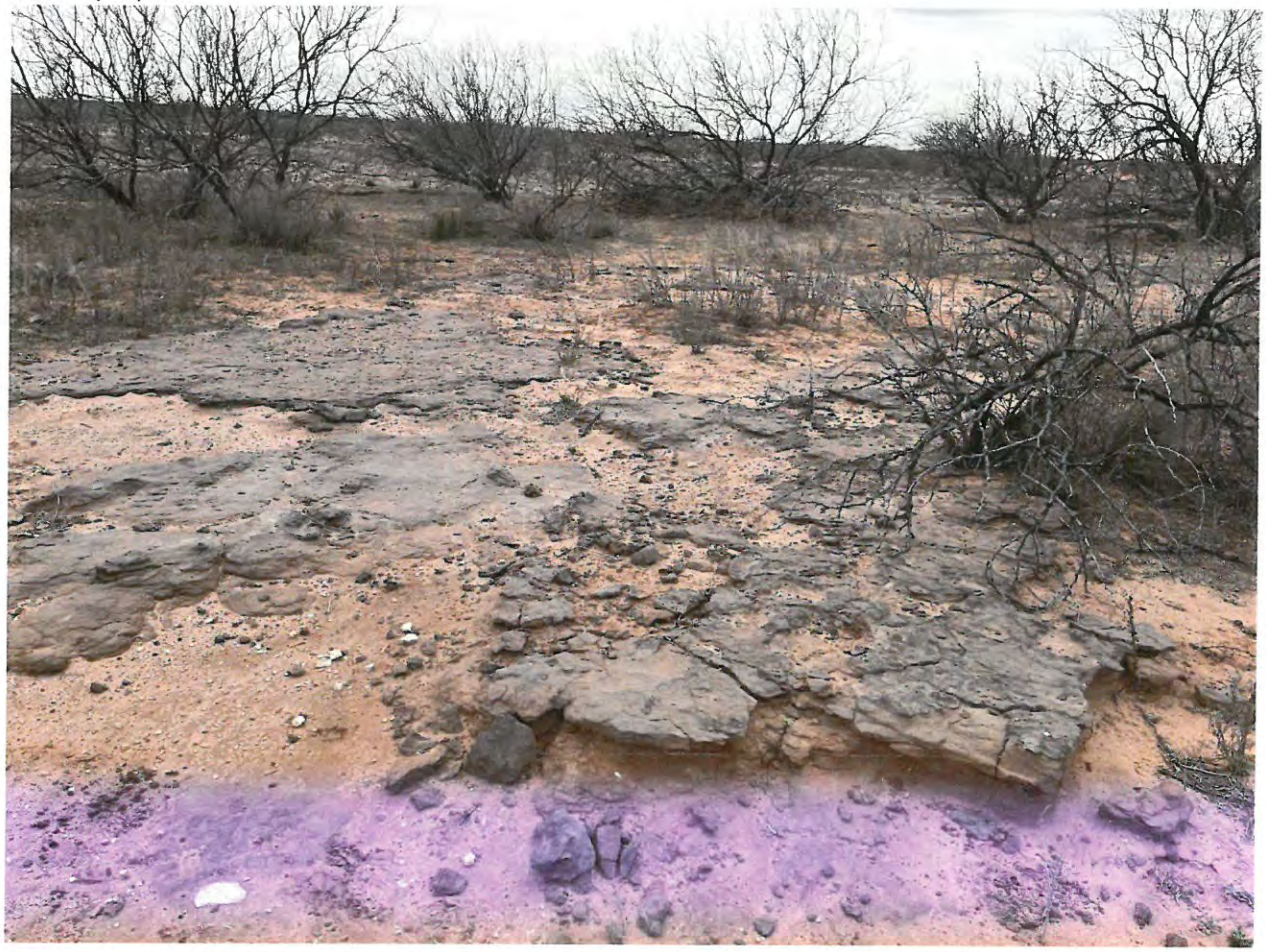
Corrective Action: The operator will need to submit a workplan document detailing how they plan on removing surface contaminants. The workplan will need to be submitted via email or mail by no later than 4/10/2024. Email pictures of completed work to Environmental Surface Protection Specialist Intern Jaden Johnston and contact with any questions or concerns.

Cell Phone: 575-988-1787
Desk Phone: 575-234-6252
Email: jjjohnston@blm.gov

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024



Inspector: Jaden Johnston
Operator: FAE II Operating LLC
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Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024

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Inspector: Jaden Johnston
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Date: 2/26/2024

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Operator: FAE II Operating LLC
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Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
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Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
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Lat: 32.4199915, -103.3013047
Date: 2/26/2024

Inspector: Jaden Johnston
Operator: FAE II Operating LLC
Well Name: TOM CLOSSON #01
Well Number: 300-25-08801
Lat: 32.4199915, -103.3013047
Date: 2/26/2024

APPENDIX C

PHOTOGRAPHIC DOCUMENTATION

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION
TOM CLOSSON #1

View to W of historical surface impacts (3/20/24).

View to NW of historical surface impacts (3/20/24 c

View to NW of historical surface impacts (3/20/24).

View to W of historical surface impacts (3/20/24).

View to NW of surface impacts E of TB (3/20/24).

View to W of surface impacts E of TB (3/20/24).

View to W inside TB (3/20/24).

View to N inside TB (3/20/24).

APPENDIX C
PHOTOGRAPHIC DOCUMENTATION
TOM CLOSSON #1

View to NE of SB-1 excavation (5/7/24).

View to N of SB-2 excavation (5/7/24).

View of SB-3 sample location (5/7/24).

View of SB-4 sample location (5/7/24).

View of SB-5 sample location (5/7/24).

View of SB-6 sample location (5/7/24).

View of windmill well (12/5/24).

View of dry napkin out of hole after measuring to a depth of 105' bgs (12/5/24).

APPENDIX D

ALLSTATE ENVIRONMENTAL REMEDIATION PLAN

ALLSTATE ENVIRONMENTAL SERVICES, LLC

P.O BOX 11322
MIDLAND, TEXAS 79702
OFFICE: (432) 682-3547
FAX: (432) 682-4182

April 18, 2005

Mr. Paul Sheely - Environmental Engineer
New Mexico Oil Conservation Division
1625 N. French
Hobbs, New Mexico 88240

Ms. Kathy Haston - Petroleum Engineer Technician
Ms. Trishia C. Bad Bear - Natural Resource Specialist
Bureau of Land Management
414 West Taylor
Hobbs, New Mexico 88240

Subject: Cleanup of impacted soil at Guadalupe's Tom Closson Battery,
Section 6,T-22-s, R36e, Unit J

Dear Sir/Ma'am

Guadalupe Operating has recently been requested to devise a cleanup/closure plan for the impacted area around and inside the fence of the Tom Closson Battery in Lea County, approximately 10 miles west of Eunice, New Mexico.

Area Topography

The soil in this and surrounding sections is predominantly sandy with varied vegetation. The area immediately east of the tank battery consists of 152,500 square ft. (3.5 acres) of aged and crusty petroleum hydrocarbon impacted soil with scattered vegetation rooted in pockets of blow sand that have randomly collected across the area. 155 feet to the north and slightly upgrade of the impacted area is an active windmill providing water to livestock. Depth to groundwater is 170 ft. Inside the tank battery area immediately east and adjacent to the storage tanks is an area of more recently impacted soil. All other areas around the tank battery, including the truck unloading location on the west side, are of the aged crusty texture.

Actions Taken

On March 22, 2005 representatives of Allstate Environmental Services met with Mr Nelson Patton of Guadalupe Operating, and Ms. Trishia Bad Bear with the U.S.Bureau

of Land Management at the Tom Closson Battery to perform initial sampling of the area in the tank battery fence and the apparently impacted soil around the battery's fencing. Samples were taken from points approved by Ms. Bad Bear. The samples were collected in plastic bags and transferred to approved 4 oz. jars, then placed on ice for transport to Environmental Labs of Texas in Odessa, Tx. for analysis of total petroleum hydrocarbon (method 8015m) and chlorides. Prior to being transferred to jars the bags of soil were sampled by PID for BTEX content. The BTEX and TPH results are recorded on the accompanying site sketch at the bottom of the page.

Cleanup Plan

Based on this information, we feel that the soil inside the battery fencing and adjacent to the storage tanks on the east side (sample area #2 on the site sketch) needs remediation to a point that sampling of the bottom and sides of the excavation and all stockpiled soil indicates that New Mexico Oil Commission Division Spill and Cleanup Guidelines have been met for total petroleum hydrocarbon and BTEX. All other areas meet the guidelines at this time.

Sincerely,

Nelson Patton
Vice President Operations
Guadalupe Operating, LLC

Rob Elam
Site Supervisor
Allstate Environmental Svc.

cc: New Mexico Oil Commission Division - Hobbs, New Mexico
United States Bureau of Land Management - Hobbs, New Mexico
Guadalupe Operating, LLC - Midland, Tx.
Allstate Environmental Services, LLC - Midland, Tx.

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Nelson Patton
Guadalupe Operating, LLC
201 W. Wall Ste. 803
Midland, TEXAS 79701

Project: Tom Closson Tank Battery
Project Number: None Given
Location: Lea County, NM

Lab Order Number: 5C23017

Report Date: 03/28/05

Guadalupe Operating, LLC
201 W. Wall Ste. 803
Midland TEXAS, 79701

Project: Tom Closson Tank Battery
Project Number: None Given
Project Manager: Nelson Patton

Fax: (432) 570-1062

Reported:
03/28/05 11:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#2 Surf	5C23017-01	Soil	03/22/05 15:50	03/23/05 14:30
#2 24inch	5C23017-02	Soil	03/22/05 16:00	03/23/05 14:30
#9 6-12inch	5C23017-03	Soil	03/22/05 14:55	03/23/05 14:30
#9 Surf	5C23017-04	Soil	03/22/05 14:50	03/23/05 14:30

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#2 Surf (5C23017-01) Soil									
Gasoline Range Organics C6-C12	**1930**	50.0	mg/kg dry	5	EC52312	03/24/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	**52100**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**54000**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*23.2 %*	*67.6-140*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*29.0 %*	*70-130*		"	"	"	"	*S-06*
#2 24inch (5C23017-02) Soil									
Gasoline Range Organics C6-C12	**455**	50.0	mg/kg dry	5	EC52312	03/24/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	**6950**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**7400**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*19.4 %*	*67.6-140*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*25.2 %*	*70-130*		"	"	"	"	*S-06*
#9 6-12inch (5C23017-03) Soil									
Gasoline Range Organics C6-C12	**J [5.37]**	10.0	mg/kg dry	1	EC52312	03/24/05	03/25/05	EPA 8015M	J
Diesel Range Organics >C12-C35	**682**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**682**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*115 %*	*70-130*		"	"	"	"	
#9 Surf (5C23017-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52312	03/24/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	**2210**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2210**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.6 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*110 %*	*70-130*		"	"	"	"	

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#2 Surf (5C23017-01) Soil									
Chloride	**85.6**	5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**5.5**	0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#2 24inch (5C23017-02) Soil									
Chloride	**56.3**	5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**4.6**	0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#9 6-12inch (5C23017-03) Soil									
% Moisture	**5.9**	0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#9 Surf (5C23017-04) Soil									
Chloride	**34.3**	5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**2.6**	0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52312 - Solvent Extraction (GC)										
Blank (EC52312-BLK1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*36.7*		*mg/kg*	*50.0*		*73.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.0*		"	*50.0*		*78.0*	*70-130*			
LCS (EC52312-BS1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	485	10.0	mg/kg wet	500		97.0	76.3-104			
Diesel Range Organics >C12-C35	479	10.0	"	500		95.8	76.1-118			
Total Hydrocarbon C6-C35	964	10.0	"	1000		96.4	81.8-105			
Surrogate: 1-Chlorooctane	*39.9*		*mg/kg*	*50.0*		*79.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.9*		"	*50.0*		*79.8*	*70-130*			
Calibration Check (EC52312-CCV1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	464		mg/kg	500		92.8	80-120			
Diesel Range Organics >C12-C35	495		"	500		99.0	80-120			
Total Hydrocarbon C6-C35	959		"	1000		95.9	80-120			
Surrogate: 1-Chlorooctane	*45.9*		"	*50.0*		*91.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*40.0*		"	*50.0*		*80.0*	*70-130*			
Matrix Spike (EC52312-MS1)	**Source: 5C23010-01**			Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	577	10.0	mg/kg dry	583	6.88	97.8	75.9-114			
Diesel Range Organics >C12-C35	644	10.0	"	583	29.6	105	85.3-122			
Total Hydrocarbon C6-C35	1220	10.0	"	1170	29.6	102	84.4-115			
Surrogate: 1-Chlorooctane	*58.4*		*mg/kg*	*50.0*		*117*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*50.3*		"	*50.0*		*101*	*70-130*			
Matrix Spike Dup (EC52312-MSD1)	**Source: 5C23010-01**			Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	548	10.0	mg/kg dry	583	6.88	92.8	75.9-114	5.16	10.4	
Diesel Range Organics >C12-C35	648	10.0	"	583	29.6	106	85.3-122	0.619	10.4	
Total Hydrocarbon C6-C35	1200	10.0	"	1170	29.6	100	84.4-115	1.65	7.6	
Surrogate: 1-Chlorooctane	*45.9*		*mg/kg*	*50.0*		*91.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*48.2*		"	*50.0*		*96.4*	*70-130*			

Guadalupe Operating, LLC	Project: Tom Closson Tank Battery	Fax: (432) 570-1062
201 W. Wall Ste. 803	Project Number: None Given	**Reported:**
Midland TEXAS, 79701	Project Manager: Nelson Patton	03/28/05 11:41

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52408 - General Preparation (Prep)										
Blank (EC52408-BLK1)				Prepared: 03/23/05 Analyzed: 03/24/05						
% Moisture	ND	0.1	%							
Duplicate (EC52408-DUP1)		**Source: 5C22009-01**		Prepared: 03/23/05 Analyzed: 03/24/05						
% Moisture	2.9	0.1	%		3.0			3.39	20	
Batch EC52801 - Water Extraction										
Blank (EC52801-BLK1)				Prepared & Analyzed: 03/25/05						
Chloride	ND	0.500	mg/kg							
LCS (EC52801-BS1)				Prepared & Analyzed: 03/25/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Calibration Check (EC52801-CCV1)				Prepared & Analyzed: 03/25/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Duplicate (EC52801-DUP1)		**Source: 5C22007-02**		Prepared & Analyzed: 03/25/05						
Chloride	44700	2500	mg/kg		44800			0.223	20	

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 3-28-05

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer

Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Rob / Joel / Hamp

Analytical Report

Prepared for:

Nelson Patton
Guadalupe Operating, LLC
201 W. Wall Ste. 803
Midland, TEXAS 79701

Project: Tom Closson Tank Battery
Project Number: None Given
Location: Lea County, NM

Lab Order Number: 5C23017

Report Date: 03/28/05

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 Reported: 03/28/05 11:41

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
#2 Surf	5C23017-01	Soil	03/22/05 15:50	03/23/05 14:30
#2 24inch	5C23017-02	Soil	03/22/05 16:00	03/23/05 14:30
#9 6-12inch	5C23017-03	Soil	03/22/05 14:55	03/23/05 14:30
#9 Surf	5C23017-04	Soil	03/22/05 14:50	03/23/05 14:30

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Guadalupe Operating, LLC	Project: Tom Closson Tank Battery	Fax: (432) 570-1062
201 W. Wall Ste. 803	Project Number: None Given	Reported:
Midland TEXAS, 79701	Project Manager: Nelson Patton	03/28/05 11:41

Organics by GC
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#2 Surf (5C23017-01) Soil									
Gasoline Range Organics C6-C12	**1930**	50.0	mg/kg dry	5	EC52312	03/24/05	03/25/05	EPA 8015M	
Diesel Range Organics >C12-C35	**52100**	50.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**54000**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*23.2 %*	*67.6-140*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*29.0 %*	*70-130*		"	"	"	"	*S-06*
#2 24inch (5C23017-02) Soil									
Gasoline Range Organics C6-C12	**455** ✓	50.0	mg/kg dry	5	EC52312	03/24/05	03/25/05	EPA 8015M	
1950↑ **Diesel Range Organics >C12-C35**	**6950**	50.0	"	"	"	"	"	"	
2400↑ **Total Hydrocarbon C6-C35**	**7400**	50.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*19.4 %*	*67.6-140*		"	"	"	"	*S-06*
Surrogate: 1-Chlorooctadecane		*25.2 %*	*70-130*		"	"	"	"	*S-06*
#9 6-12inch (5C23017-03) Soil									
Gasoline Range Organics C6-C12	**J [5.37]**	10.0	mg/kg dry	1	EC52312	03/24/05	03/25/05	EPA 8015M	J
Diesel Range Organics >C12-C35	**682**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**682**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*101 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*115 %*	*70-130*		"	"	"	"	
#9 Surf (5C23017-04) Soil									
Gasoline Range Organics C6-C12	ND	10.0	mg/kg dry	1	EC52312	03/24/05	03/25/05	EPA 8015M	
2800↓ **Diesel Range Organics >C12-C35**	**2210**	10.0	"	"	"	"	"	"	
Total Hydrocarbon C6-C35	**2210**	10.0	"	"	"	"	"	"	
Surrogate: 1-Chlorooctane		*94.6 %*	*67.6-140*		"	"	"	"	
Surrogate: 1-Chlorooctadecane		*110 %*	*70-130*		"	"	"	"	

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

General Chemistry Parameters by EPA / Standard Methods
Environmental Lab of Texas

Analyte	Result		Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
#2 Surf (5C23017-01) Soil										
Chloride	**85.6**	↓	5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**5.5**		0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#2 24inch (5C23017-02) Soil										
Chloride	**56.3**	↓	5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**4.6**		0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#9 6-12inch (5C23017-03) Soil										
% Moisture	**5.9**		0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	
#9 Surf (5C23017-04) Soil										
Chloride	**34.3**		5.00	mg/kg	10	EC52801	03/25/05	03/25/05	EPA 300.0	
% Moisture	**2.6**		0.1	%	1	EC52408	03/23/05	03/24/05	% calculation	

250 is Limits
All below Limits

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Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

Organics by GC - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52312 - Solvent Extraction (GC)										
Blank (EC52312-BLK1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	ND	10.0	mg/kg wet							
Diesel Range Organics >C12-C35	ND	10.0	"							
Total Hydrocarbon C6-C35	ND	10.0	"							
Surrogate: 1-Chlorooctane	*36.7*		*mg/kg*	*50.0*		*73.4*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.0*		"	*50.0*		*78.0*	*70-130*			
LCS (EC52312-BS1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	485	10.0	mg/kg wet	500		97.0	76.3-104			
Diesel Range Organics >C12-C35	479	10.0	"	500		95.8	76.1-118			
Total Hydrocarbon C6-C35	964	10.0	"	1000		96.4	81.8-105			
Surrogate: 1-Chlorooctane	*39.9*		*mg/kg*	*50.0*		*79.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*39.9*		"	*50.0*		*79.8*	*70-130*			
Calibration Check (EC52312-CCV1)				Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	464		mg/kg	500		92.8	80-120			
Diesel Range Organics >C12-C35	495		"	500		99.0	80-120			
Total Hydrocarbon C6-C35	959		"	1000		95.9	80-120			
Surrogate: 1-Chlorooctane	*45.9*		"	*50.0*		*91.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*40.0*		"	*50.0*		*80.0*	*70-130*			
Matrix Spike (EC52312-MS1)	Source: 5C23010-01			Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	577	10.0	mg/kg dry	583	6.88	97.8	75.9-114			
Diesel Range Organics >C12-C35	644	10.0	"	583	29.6	105	85.3-122			
Total Hydrocarbon C6-C35	1220	10.0	"	1170	29.6	102	84.4-115			
Surrogate: 1-Chlorooctane	*58.4*		*mg/kg*	*50.0*		*117*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*50.3*		"	*50.0*		*101*	*70-130*			
Matrix Spike Dup (EC52312-MSD1)	Source: 5C23010-01			Prepared: 03/23/05 Analyzed: 03/24/05						
Gasoline Range Organics C6-C12	548	10.0	mg/kg dry	583	6.88	92.8	75.9-114	5.16	10.4	
Diesel Range Organics >C12-C35	648	10.0	"	583	29.6	106	85.3-122	0.619	10.4	
Total Hydrocarbon C6-C35	1200	10.0	"	1170	29.6	100	84.4-115	1.65	7.6	
Surrogate: 1-Chlorooctane	*45.9*		*mg/kg*	*50.0*		*91.8*	*67.6-140*			
Surrogate: 1-Chlorooctadecane	*48.2*		"	*50.0*		*96.4*	*70-130*			

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Guadalupe Operating, LLC 201 W. Wall Ste. 803 Midland TEXAS, 79701	Project: Tom Closson Tank Battery Project Number: None Given Project Manager: Nelson Patton	Fax: (432) 570-1062 **Reported:** 03/28/05 11:41

General Chemistry Parameters by EPA / Standard Methods - Quality Control
Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EC52408 - General Preparation (Prep)										
Blank (EC52408-BLK1)				Prepared: 03/23/05 Analyzed: 03/24/05						
% Moisture	ND	0.1	%							
Duplicate (EC52408-DUP1)		Source: 5C22009-01		Prepared: 03/23/05 Analyzed: 03/24/05						
% Moisture	2.9	0.1	%		3.0			3.39	20	
Batch EC52801 - Water Extraction										
Blank (EC52801-BLK1)				Prepared & Analyzed: 03/25/05						
Chloride	ND	0.500	mg/kg							
LCS (EC52801-BS1)				Prepared & Analyzed: 03/25/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Calibration Check (EC52801-CCV1)				Prepared & Analyzed: 03/25/05						
Chloride	10.5		mg/L	10.0		105	80-120			
Duplicate (EC52801-DUP1)		Source: 5C22007-02		Prepared & Analyzed: 03/25/05						
Chloride	44700	2500	mg/kg		44800			0.223	20	

Guadalupe Operating, LLC	Project: Tom Closson Tank Battery	Fax: (432) 570-1062
201 W. Wall Ste. 803	Project Number: None Given	Reported:
Midland TEXAS, 79701	Project Manager: Nelson Patton	03/28/05 11:41

Notes and Definitions

S-06	The recovery of this surrogate is outside control limits due to sample dilution required from high analyte concentration and/or matrix interference's.
J	Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 3-28-05

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Guadalupe DP.

Date/Time: 3/23/05 2:45

Order #: 5C23017

Initials: CK

Sample Receipt Checklist

	Yes	No	0.5 C
Temperature of container/cooler?	(Yes)	No	
Shipping container/cooler in good condition?	Yes	No	Not present
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	(Yes)	No	
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	Not Applicable
VOC samples have zero headspace?	(Yes)	No	

Other observations:

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Nelson Patton

Company Name: Guadalupe Operating, LLC

Company Address: 201 W. Wall ste 803

City/State/Zip: Midland, Tx 79701

Telephone No: cell 432-553-5080

Fax No: 432-570-1062

Sampler Signature: C. H. Kerby

Project Name: Tom Closson Tank Btry

Project #:

Project Loc: Lea County, N.M.

PO #:

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO$_3$	HCl	NaOH	H$_2$SO$_4$	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For (TCLP / TOTAL): TPH: 418.1 (8015M circled) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl circled) SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma				RUSH TAT (Pre-Schedule)	Standard TAT
-01	#2 Surf	3-22-05	3:50 pm	1	✓									✓		✓		✓												
-02	#2 24"	" "	4:00 pm	1	✓									✓		✓		✓												
-03	#9 6-12"	" "	2:55 pm	1	✓									✓		✓														
-04	#9 Surf	" "	2:50 pm	1	✓									✓		✓		✓												

Special Instructions: Fax results to Nelson Patton @ above fax number also invoice Guadalupe
E-mail results to Trishia Bad Bear - Trishia_Badbear@nm.blm.gov. + Hamp Kerby - AES

Relinquished by:	Date	Time	Received by:	Date	Time
C. H. Kerby	3-23-05	2:30 pm			
Relinquished by:	**Date**	**Time**	**Received by ELOT:**	**Date**	**Time**
			Jeanne McMurrey	03-23-05	1430

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 0.5°C
Laboratory Comments:
4oz glass on ice

Environmental Lab of Texas I, Ltd.

12600 West I-20 East
Odessa, Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Nelson Patton
Company Name: Guadalupe Operating, LLC
Company Address: 201 W. Wall ste 803
City/State/Zip: Midland, Tx 79701
Telephone No: cell 432-553-5080 Fax No: 432-570-1062
Sampler Signature: C.H. Kerby

Project Name: Tom Closson Tank Btry
Project #:
Project Loc: Lea County, N.M.
PO #:

LAB # (lab use only) 5023017	FIELD CODE	Date Sampled	Time Sampled	No. of Containers	Preservative: Ice	HNO_3	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	Analyze For: TCLP: / TOTAL: TPH: 418.1 (8015M) 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl) SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030	RCI	N.O.R.M.	Total Gamma	RUSH TAT (Pre-Schedule)	Standard TAT
-01	#2 Surf	3-22-05	3:50 pm	1	✓									✓		✓		✓										
-02	#2 24"	"	4:00 pm	1	✓									✓		✓		✓										
-03	#9 6-12"	"	2:55 pm	1	✓									✓		✓												
-04	#9 Surf	"	2:50 pm	1	✓									✓		✓		✓										

Special Instructions:
Fax results to Nelson Patton @ above fax number also invoice Guadalupe
E-mail results to Trishia Bad Bear - Trishia_Badbear@nm.blm.gov. & Hamp Kerby - AES

Sample Containers Intact? (Y) N
Temperature Upon Receipt: 0.5 °C
Laboratory Comments:
4oz glass on ice

Relinquished by:	Date	Time	Received by:	Date	Time
C.H. Kerby	3-23-05	2:30pm			
Relinquished by:	Date	Time	Received by ELOT:	Date	Time
			Jeanne McMurrey	03-23-05	1430

Environmental Lab of Texa
Variance / Corrective Action Report – Sample Log-In

Client: Guadalupe DP.

Date/Time: 3/23/05 2:45

Order #: 5C23017

Initials: CK

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0.5 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____

Regarding:

Corrective Action Taken:

ENVIRONMENTAL LAB OF

Invoice

DATE	INVOICE NO.
3/31/2005	21915

BILL TO

GUADALUPE OPERATING, LLC
NELSON PATTON
201 W. WALL, STE. 803
MIDLAND, TX 79701

Environmental Lab of Texas
12600 West I-20 East
Odessa, Texas 79765
Phone # 432-563-1800
Fax # 432-563-1713

P.O. NO.	TERMS	DUE DATE	PROJECT
	Net 30	4/30/2005	TOM CLOSSON TB

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
	ELT#5C23017-01 THRU 04			
8015M (Soil/Solid)	SW846-8015M GRO/DRO (Soil/Solid % Solids included)	4	60.00	240.00
CL 1	CHLORIDES IN SOIL	4	20.00	80.00

We appreciate your business.

Total $320.00

12/15/05

- 12/12/05 - Monday - email 2-3-calls TO

December 5, 2005

Mr. Larry Johnson
Mr. Paul Sheeley – Environmental Engineer
New Mexico Oil Conservation Division
1625 N. French
Hobbs, New Mexico 88240

Subject: Cleanup of impacted soil at Guadalupe's Tom Closson Battery, Section 6,T-22-s, R36e, Unit J - Revision of Plan Submitted June 20, 2005

Dear Paul,

In your letter of November 4, 2005 to Scott Kimbrough of Guadalupe Operating, you instructed Guadalupe to revise their cleanup/closure plan for the impacted area inside the fence as well as the playa (3.5 acres) to the east of the Tom Closson Battery in Lea County, approximately 10 miles west of Eunice, New Mexico. The revision includes the 11 listed items (the first 9 to be addressed in this mailing) in the letter.

Allstate Environmental Services has been contracted by Guadalupe to forward this plan to you and carry out the task of remediation of the subject site. Items 1 thru 9 will be listed below and explained:

1) Notifications at the prescribed email addresses will be forwarded to you and Mr. Larry Johnson at least 48 hours prior to any sampling, backfilling and/or construction activities and shall be documented in the closure report with the event, time, date and OCD representative's name.

2) Comparable to #1.

3) There have been no spills of 5 bbls. or more since January 1, 2003 at the subject site.

4) A. Analytical results and data collected from soil sampling November 30 are found in attachment I, are in tabular form and include a sketch of the site. Also in attachment I is a copy of a water sample taken from a hydrant at the discharge connection of the windmill 150 feet north of the playa. Lab analysis results for all lab samples taken at this site make up the contents of attachment III. B. On July 26, 2005 hand borings with a 3" auger were done with Trishia Bad Bear, U.S. Bureau of Land Management, in attendance along with Nelson Patton of Guadalupe Operating and Hamp Kerby with Allstate Environmental Services. Attachment II is a site sketch with a table of sample results included from that event. The table in the lower left corner of Attachment II shows

results of hand borings from a site visit March 22, 2005 with the same representatives in attendance.

5) On Wednesday the 30th of November 2005, 3 boreholes were drilled, 2 in the playa and 1 in the fenced battery area. A sketch indicating the boring locations and headspace test results are included in attachment I. Notifications by email were made to Mr. Paul Sheeley, (NMOCD Dist. 1) and Mr. Larry Johnson (NMOCD Dist. 1) on Monday the 21st of November, then, followed up with a phone call to your voice mail Monday the 28th of November, 2005.

6) "Risk out" plan in item #7.

7) Prior to commencement of soil remediation, all tanks will be removed from the site and replaced by new upon completion of the site cleanup. Contaminated soils will be excavated to a depth of 5 ft. and mixed with native surrounding soils in the areas immediately south and east of the fenced battery area. Soils will be mixed and sampled in batches of 100 cubic yards of contaminated soil. All samples will be for confirmation of 5,000 ppm Total Petroleum Hydrocarbon (TPH) or less (Method 8015M) and total BTEX levels of 100 ppm (PID meter). Sampling conducted November 30 indicates little or no impact from chlorides. Upon reaching acceptable levels, an impermeable barrier of one (1) ft. of compacted clay will be placed in the bottom of the excavation, and then the mixed soil will be put back in place inside the battery area. The new tanks will be supported by fresh caliche or like material and surrounded by a berm to prevent runoff from future spills.

8) Information acquired from the New Mexico State Engineer's waters database indicates groundwater depth to be at 195 ft. bgs. Cleanup levels are based on this information.(attachment I)

9) See item 7.

Any questions or concerns may be addressed to Hamp Kerby or Rob Elam, Allstate Environmental Services at 432-528-5716 or at email address allstateenv@sbcglobal.net.

Sincerely,

Hamp Kerby – Allstate Environmental Services

Concurrence: Scott Kimbrough_____

cc: Nelson Patton/Scott Kimbrough - Guadalupe Operating

Attachment I

Table of Sampling and Site Sketch
From November 30, 2005

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 22S Range: 36E Sections: 6

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) Non-Domestic Domestic All

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 12/06/2005

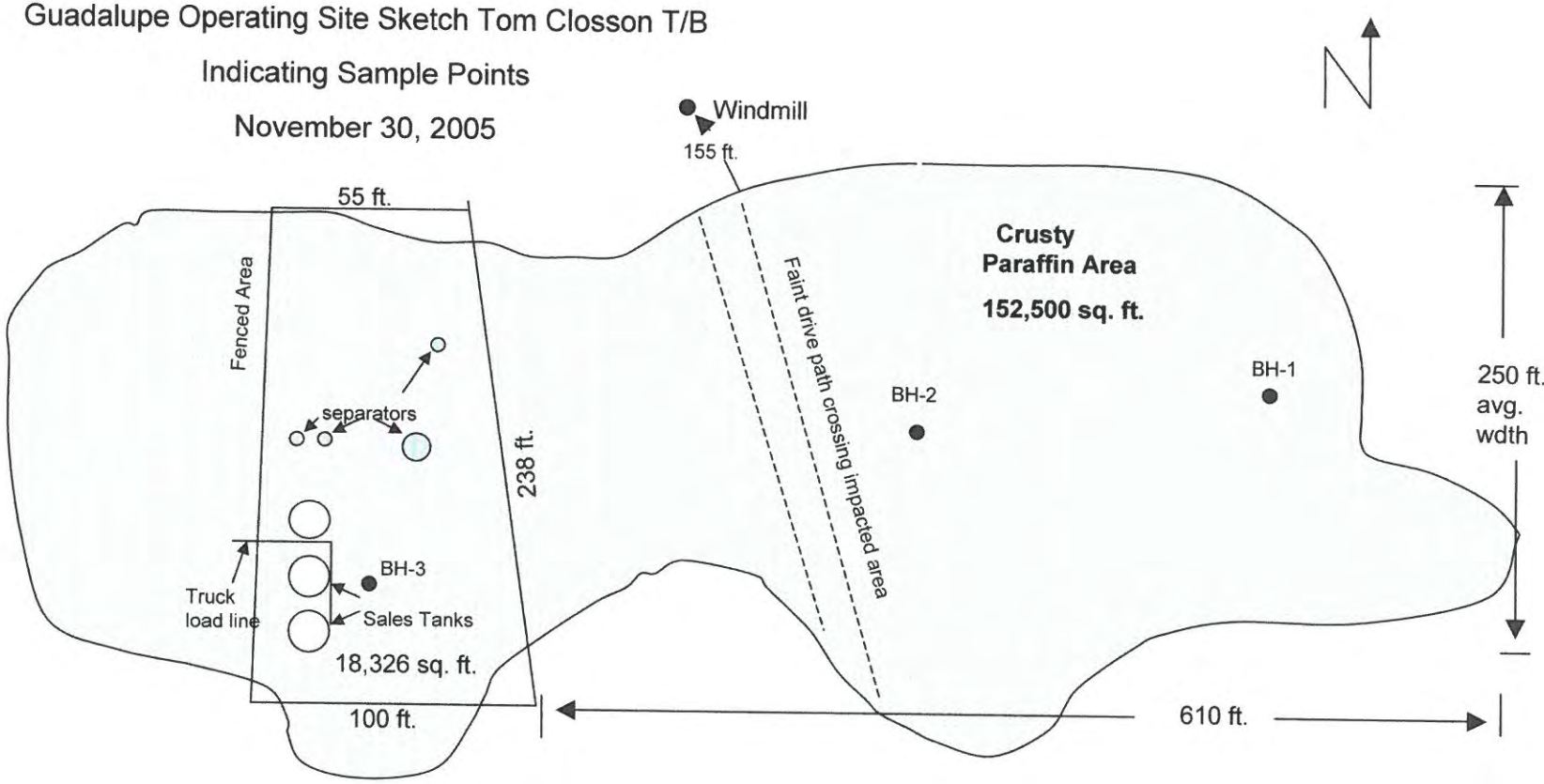
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet) Min	Max	Avg
CP	22S	36E	06				1	195	195	195

Record Count: 1

Guadalupe Operating Site Sketch Tom Closson T/B

Indicating Sample Points

November 30, 2005



Sample points marked by ●

Depth to groundwater 170 ft. per Paul Sheeley, NMOCD, Hobbs, N.M.

AES	Date: 11-30-05	N
Company: Guadalupe Operating Co., Inc.		
Lease Name: Tom Closson Btry.		
Location (GPS/qtrs.): UL-J Sec. 6 t22e r36e Lea County, New Mexico		

Attachment I

Guadalupe Tom Closson Btry

Sample Results

Samples Taken 11/30/2005 with Drilling Rig

			Bkgrd Cl 129 ppm		
Sample Point	Depth	PID(ppm)	Chlorides (ppm)	GPS	Comments
BH-1	5'	54.5	232	N32°25' 09.0" W103°18'02.1"	
BH-2	5'	64.1	306	N32°25' 09.5" W103°18'04.8"	
BH-2	10'	40.5	315		
BH-2	15'	20.2	306		
BH-3	5'	801	224	N32°25' 10.3" W103°18'09.1"	
	10'	743	144		
	15'	760			
	20'	1218			
	25'	1202			
	30'	1206			
	35'	1072			
	40'	1209			
	45'	1279			
	50'	962			
	55'	1242			
	60'	1206			
	65'	11930			
	70'	1372			
	75'	1217			
	80'	747			
	91'	40.6	118		TPH (418.1) = 67 ppm

Lab Analysis Results for BH-3@91'

BH-3	91'			N32°25' 10.3" W103°18'09.1"	

Background Field Test for Chlorides

Bkgd	Surface		129	N32°25'08.1" W103°18'3.5"	

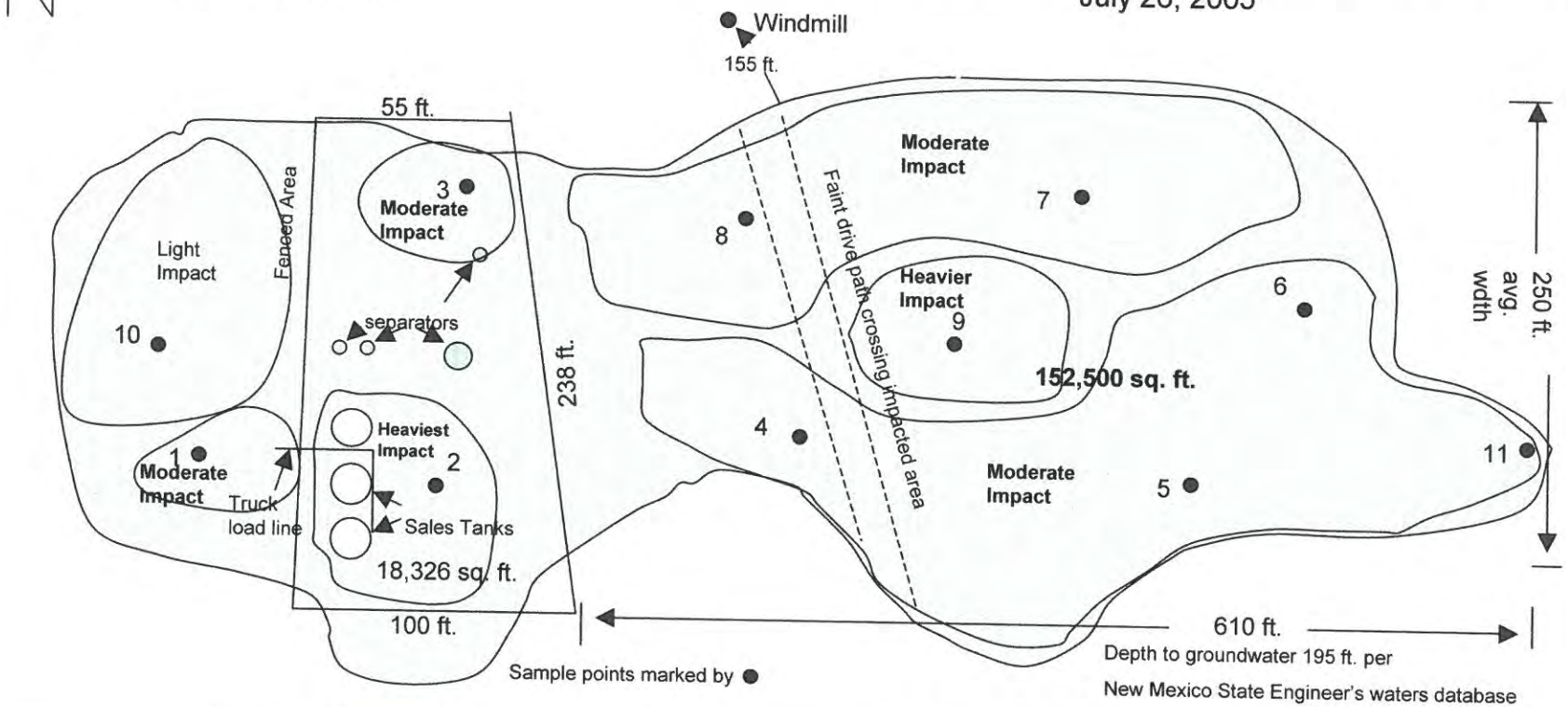
Attachment II

Table of Sampling and Site Sketch
from July 26, 2005

Attachment II

Guadalupe Operating Site Sketch Tom Closson T/B Indicating Sample Points

July 26, 2005



March 22 TPH Samples:

Pnt. #2 24" 7400 ppm

Pnt #9 6-12" 682 ppm

Pnt #9 surf 2210 ppm

sample pt.	tph ppm	chlorides ppm	btex ppm	sample pt.	tph ppm	chlorides ppm	btex ppm
1 surf	11,000	638		6 6-12"	15100	21.3	
1 6-12"	8460	63.8		7 surf	1270	21.3	
1 24"	5130	19 1		7 6-12"	3980	21.3	
2 surf	26900	85.1		8 surf	6060	21.3	
2 6-12"	20200	21.3		8 6-12"	872	21.3	
2 24"	3050	21.3		9a surf	4830	21.3	
3 surf	12400	734		9a 6-12"	29600	21.3	
4 surf	5550	21.3		10 surf	1090	21.3	nd
4 6-12"	1630	21.3		10 6-12"	808	21.3	nd
5 surf	1480	106		10 18"	644	21.3	nd
5 6-12"	288	21.3		11 surf	4740	21.3	nd
6 surf	2760	21.3		11 6-12"	1110	21.3	nd

AES

Date: July 26, 2005

N

Company: Guadalupe Operating Co., Inc.

Lease Name: Tom Closson Btry.

32°25'10.3"N – 103°18'09.1"W

Grain Environmental

APPENDIX E

LABORATORY REPORT AND CHAIN OF CUSTODY DOCUMENTATION

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/20/2024 1:48:13 PM Revision 1

JOB DESCRIPTION

Tom Closson #1
Lea Co., NM

JOB NUMBER

880-43226-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

See page two for job notes and contact information.

my EOL

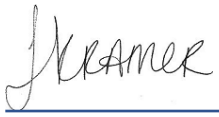
Eurofins Midland

Job Notes

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

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

Authorization



Generated
5/20/2024 1:48:13 PM
Revision 1

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

Client: Crain Environmental
Project/Site: Tom Closson #1

Laboratory Job ID: 880-43226-1
SDG: Lea Co., NM

Table of Contents

Definitions/Glossary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Qualifiers

GC 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.

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.

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: Tom Closson #1

Job ID: 880-43226-1

Job ID: 880-43226-1 Eurofins Midland

Job Narrative
880-43226-1

REVISION

The report being provided is a revision of the original report sent on 5/15/2024. The report (revision 1) is being revised due to Per client email, requesting TPH be added to additional samples.

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 5/8/2024 10:57 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 1.5°C.

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: SB-1 (1') (880-43226-1), SB-1 (2') (880-43226-2), SB-1 (3') (880-43226-3), SB-1 (4.1') (880-43226-4), SB-2 (1') (880-43226-5), SB-2 (2') (880-43226-6), SB-2 (3') (880-43226-7), SB-2 (4.1') (880-43226-8), SB-3 (1') (880-43226-9), SB-3 (2') (880-43226-10), SB-3 (3') (880-43226-11), SB-3 (4.1') (880-43226-12), SB-4 (1') (880-43226-13), SB-4 (2') (880-43226-14), SB-4 (3') (880-43226-15), SB-4 (4.1') (880-43226-16), SB-4 (9') (880-43226-17), SB-5 (1') (880-43226-18), SB-5 (2') (880-43226-19), SB-5 (3') (880-43226-20), SB-5 (4.1') (880-43226-21), SB-6 (1') (880-43226-22), SB-6 (2') (880-43226-23), SB-6 (3') (880-43226-24), SB-6 (4.1') (880-43226-25), SB-6 (6.5') (880-43226-26) and SB-6 (9') (880-43226-27).

GC VOA
Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-80259 and analytical batch 880-80207 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SB-3 (1') (880-43226-9). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SB-1 (3') (880-43226-3), SB-2 (1') (880-43226-5), SB-2 (3') (880-43226-7) and SB-3 (3') (880-43226-11). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-80369 and analytical batch 880-80320 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

Method 8021B: The following samples were diluted due to the nature of the sample matrix: SB-1 (3') (880-43226-3), SB-2 (1') (880-43226-5), SB-2 (3') (880-43226-7), SB-3 (1') (880-43226-9) and SB-3 (3') (880-43226-11). Elevated reporting limits (RLs) are provided.

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 sample was outside control limits: SB-1 (1') (880-43226-1). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

Case Narrative

Client: Crain Environmental
Project: Tom Closson #1

Job ID: 880-43226-1

Job ID: 880-43226-1 (Continued) Eurofins Midland

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-3 (3') (880-43226-11) and SB-6 (1') (880-43226-22). Evidence of matrix interference due to high target analytes is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SB-2 (1') (880-43226-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SB-6 (6.5') (880-43226-26) and SB-6 (9') (880-43226-27). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The continuing calibration verification (CCV) associated with batch 880-80845 recovered below the lower 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 880-80845/31).

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

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

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-1 (1')

Date Collected: 05/07/24 08:40
Date Received: 05/08/24 10:57
Sample Depth: 1'

Lab Sample ID: 880-43226-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0996	U	0.0996		mg/Kg		05/08/24 14:21	05/08/24 18:13	50
Toluene	<0.0996	U	0.0996		mg/Kg		05/08/24 14:21	05/08/24 18:13	50
Ethylbenzene	<0.0996	U	0.0996		mg/Kg		05/08/24 14:21	05/08/24 18:13	50
m-Xylene & p-Xylene	<0.199	U	0.199		mg/Kg		05/08/24 14:21	05/08/24 18:13	50
o-Xylene	**0.189**		0.0996		mg/Kg		05/08/24 14:21	05/08/24 18:13	50
Xylenes, Total	<0.199	U	0.199		mg/Kg		05/08/24 14:21	05/08/24 18:13	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*05/08/24 14:21*	*05/08/24 18:13*	*50*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*05/08/24 14:21*	*05/08/24 18:13*	*50*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.199	U	0.199		mg/Kg			05/08/24 18:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**9720**		500		mg/Kg			05/12/24 10:04	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	<500	U	500		mg/Kg		05/08/24 16:20	05/12/24 10:04	10
Diesel Range Organics (Over C10-C28)	**8120**		500		mg/Kg		05/08/24 16:20	05/12/24 10:04	10
Oil Range Organics (Over C28-C36)	**1600**		500		mg/Kg		05/08/24 16:20	05/12/24 10:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*153*	*S1+*	*70 - 130*	*05/08/24 16:20*	*05/12/24 10:04*	*10*
o-Terphenyl	*176*	*S1+*	*70 - 130*	*05/08/24 16:20*	*05/12/24 10:04*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**534**		5.03		mg/Kg			05/09/24 02:51	1

Client Sample ID: SB-1 (3')

Date Collected: 05/07/24 08:55
Date Received: 05/08/24 10:57
Sample Depth: 3'

Lab Sample ID: 880-43226-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0401	U *+ *1	0.0401		mg/Kg		05/09/24 14:16	05/10/24 04:59	20
Toluene	**0.0683**	***+ *1**	0.0401		mg/Kg		05/09/24 14:16	05/10/24 04:59	20
Ethylbenzene	**0.132**	***+ *1**	0.0401		mg/Kg		05/09/24 14:16	05/10/24 04:59	20
m-Xylene & p-Xylene	**0.111**	***+ *1**	0.0802		mg/Kg		05/09/24 14:16	05/10/24 04:59	20
o-Xylene	**0.338**	***+ *1**	0.0401		mg/Kg		05/09/24 14:16	05/10/24 04:59	20
Xylenes, Total	**0.449**	***+ *1**	0.0802		mg/Kg		05/09/24 14:16	05/10/24 04:59	20

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-1 (3')

Date Collected: 05/07/24 08:55
Date Received: 05/08/24 10:57
Sample Depth: 3'

Lab Sample ID: 880-43226-3
Matrix: Solid

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*199*	*S1+*	*70 - 130*	*05/09/24 14:16*	*05/10/24 04:59*	*20*
1,4-Difluorobenzene (Surr)	*128*		*70 - 130*	*05/09/24 14:16*	*05/10/24 04:59*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.649**		0.0802		mg/Kg			05/10/24 04:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2030**		50.0		mg/Kg			05/11/24 03:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	**60.5**		50.0		mg/Kg		05/08/24 16:52	05/11/24 03:47	1
Diesel Range Organics (Over C10-C28)	**1970**		50.0		mg/Kg		05/08/24 16:52	05/11/24 03:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/08/24 16:52	05/11/24 03:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*05/08/24 16:52*	*05/11/24 03:47*	*1*
o-Terphenyl	*106*		*70 - 130*	*05/08/24 16:52*	*05/11/24 03:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**289**		4.98		mg/Kg			05/09/24 02:56	1

Client Sample ID: SB-1 (4.1')

Date Collected: 05/07/24 09:04
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

Lab Sample ID: 880-43226-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			05/14/24 21:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		05/08/24 13:27	05/14/24 21:14	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		05/08/24 13:27	05/14/24 21:14	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		05/08/24 13:27	05/14/24 21:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*05/08/24 13:27*	*05/14/24 21:14*	*1*
o-Terphenyl	*93*		*70 - 130*	*05/08/24 13:27*	*05/14/24 21:14*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**227**		5.00		mg/Kg			05/09/24 03:02	1

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-2 (1')

Lab Sample ID: 880-43226-5
Matrix: Solid
Date Collected: 05/07/24 09:10
Date Received: 05/08/24 10:57
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U *+ *1	0.0398		mg/Kg		05/09/24 14:16	05/10/24 05:19	20
Toluene	**0.101**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 05:19	20
Ethylbenzene	**1.05**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 05:19	20
m-Xylene & p-Xylene	**3.83**	***+ *1**	0.0797		mg/Kg		05/09/24 14:16	05/10/24 05:19	20
o-Xylene	**1.41**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 05:19	20
Xylenes, Total	**5.24**	***+ *1**	0.0797		mg/Kg		05/09/24 14:16	05/10/24 05:19	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*224*	*S1+*	*70 - 130*	*05/09/24 14:16*	*05/10/24 05:19*	*20*
1,4-Difluorobenzene (Surr)	*122*		*70 - 130*	*05/09/24 14:16*	*05/10/24 05:19*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**6.39**		0.0797		mg/Kg			05/10/24 05:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**7710**		994		mg/Kg			05/14/24 21:31	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	<994	U	994		mg/Kg		05/08/24 13:27	05/14/24 21:31	20
Diesel Range Organics (Over C10-C28)	**7710**		994		mg/Kg		05/08/24 13:27	05/14/24 21:31	20
Oil Range Organics (Over C28-C36)	<994	U	994		mg/Kg		05/08/24 13:27	05/14/24 21:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*134*	*S1+*	*70 - 130*	*05/08/24 13:27*	*05/14/24 21:31*	*20*
o-Terphenyl	*266*	*S1+*	*70 - 130*	*05/08/24 13:27*	*05/14/24 21:31*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**175**		4.97		mg/Kg			05/10/24 19:54	1

Client Sample ID: SB-2 (3')

Lab Sample ID: 880-43226-7
Matrix: Solid
Date Collected: 05/07/24 09:20
Date Received: 05/08/24 10:57
Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**0.212**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 05:40	20
Toluene	**0.0914**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 05:40	20
Ethylbenzene	**0.0526**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 05:40	20
m-Xylene & p-Xylene	**0.0861**	***+ *1**	0.0798		mg/Kg		05/09/24 14:16	05/10/24 05:40	20
o-Xylene	**0.721**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 05:40	20
Xylenes, Total	**0.807**	***+ *1**	0.0798		mg/Kg		05/09/24 14:16	05/10/24 05:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*140*	*S1+*	*70 - 130*	*05/09/24 14:16*	*05/10/24 05:40*	*20*

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-2 (3')

Date Collected: 05/07/24 09:20
Date Received: 05/08/24 10:57
Sample Depth: 3'

Lab Sample ID: 880-43226-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*126*		*70 - 130*	*05/09/24 14:16*	*05/10/24 05:40*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**1.16**		0.0798		mg/Kg			05/10/24 05:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<498	U	498		mg/Kg			05/14/24 21:48	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	<498	U	498		mg/Kg		05/08/24 13:27	05/14/24 21:48	10
Diesel Range Organics (Over C10-C28)	<498	U	498		mg/Kg		05/08/24 13:27	05/14/24 21:48	10
Oil Range Organics (Over C28-C36)	<498	U	498		mg/Kg		05/08/24 13:27	05/14/24 21:48	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/08/24 13:27*	*05/14/24 21:48*	*10*
o-Terphenyl	*100*		*70 - 130*	*05/08/24 13:27*	*05/14/24 21:48*	*10*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**21.8**		4.99		mg/Kg			05/10/24 20:13	1

Client Sample ID: SB-2 (4.1')

Date Collected: 05/07/24 09:25
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

Lab Sample ID: 880-43226-8

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/08/24 14:21	05/08/24 17:46	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/08/24 14:21	05/08/24 17:46	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/08/24 14:21	05/08/24 17:46	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		05/08/24 14:21	05/08/24 17:46	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/08/24 14:21	05/08/24 17:46	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		05/08/24 14:21	05/08/24 17:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*05/08/24 14:21*	*05/08/24 17:46*	*1*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*	*05/08/24 14:21*	*05/08/24 17:46*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			05/08/24 17:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/14/24 20:07	1

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Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-2 (4.1')

Lab Sample ID: 880-43226-8
Matrix: Solid
Date Collected: 05/07/24 09:25
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:07	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:07	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:07*	*1*
o-Terphenyl	*85*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**493**		4.98		mg/Kg			05/10/24 20:19	1

Client Sample ID: SB-3 (1')

Lab Sample ID: 880-43226-9
Matrix: Solid
Date Collected: 05/07/24 09:35
Date Received: 05/08/24 10:57
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0399	U *+ *1	0.0399		mg/Kg		05/09/24 14:16	05/10/24 06:00	20
Toluene	**0.180**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 06:00	20
Ethylbenzene	**1.33**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 06:00	20
m-Xylene & p-Xylene	**5.12**	***+ *1**	0.0798		mg/Kg		05/09/24 14:16	05/10/24 06:00	20
o-Xylene	**1.44**	***+ *1**	0.0399		mg/Kg		05/09/24 14:16	05/10/24 06:00	20
Xylenes, Total	**6.56**	***+ *1**	0.0798		mg/Kg		05/09/24 14:16	05/10/24 06:00	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*191*	*S1+*	*70 - 130*	*05/09/24 14:16*	*05/10/24 06:00*	*20*
1,4-Difluorobenzene (Surr)	*123*		*70 - 130*	*05/09/24 14:16*	*05/10/24 06:00*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**8.07**		0.0798		mg/Kg			05/10/24 06:00	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1850**		996		mg/Kg			05/14/24 20:23	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<996	U	996		mg/Kg		05/08/24 09:07	05/14/24 20:23	20
Diesel Range Organics (Over C10-C28)	**1850**		996		mg/Kg		05/08/24 09:07	05/14/24 20:23	20
Oil Range Organics (Over C28-C36)	<996	U	996		mg/Kg		05/08/24 09:07	05/14/24 20:23	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*116*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:23*	*20*
o-Terphenyl	*128*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:23*	*20*

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-3 (1')

Date Collected: 05/07/24 09:35
Date Received: 05/08/24 10:57
Sample Depth: 1'

Lab Sample ID: 880-43226-9
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**30.4**		5.02		mg/Kg			05/10/24 20:25	1

Client Sample ID: SB-3 (3')

Date Collected: 05/07/24 09:45
Date Received: 05/08/24 10:57
Sample Depth: 3'

Lab Sample ID: 880-43226-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0398	U *+ *1	0.0398		mg/Kg		05/09/24 14:16	05/10/24 06:21	20
Toluene	**0.275**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 06:21	20
Ethylbenzene	**0.681**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 06:21	20
m-Xylene & p-Xylene	**4.18**	***+ *1**	0.0795		mg/Kg		05/09/24 14:16	05/10/24 06:21	20
o-Xylene	**1.05**	***+ *1**	0.0398		mg/Kg		05/09/24 14:16	05/10/24 06:21	20
Xylenes, Total	**5.23**	***+ *1**	0.0795		mg/Kg		05/09/24 14:16	05/10/24 06:21	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*246*	*S1+*	*70 - 130*	*05/09/24 14:16*	*05/10/24 06:21*	*20*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*05/09/24 14:16*	*05/10/24 06:21*	*20*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**6.19**		0.0795		mg/Kg			05/10/24 06:21	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**2950**		999		mg/Kg			05/14/24 20:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<999	U	999		mg/Kg		05/08/24 09:07	05/14/24 20:40	20
Diesel Range Organics (Over C10-C28)	**2950**		999		mg/Kg		05/08/24 09:07	05/14/24 20:40	20
Oil Range Organics (Over C28-C36)	<999	U	999		mg/Kg		05/08/24 09:07	05/14/24 20:40	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:40*	*20*
o-Terphenyl	*137*	*S1+*	*70 - 130*	*05/08/24 09:07*	*05/14/24 20:40*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**24.1**		4.98		mg/Kg			05/10/24 20:32	1

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-3 (4.1')

Lab Sample ID: 880-43226-12
Matrix: Solid
Date Collected: 05/07/24 09:50
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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			05/14/24 20:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:57	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:57	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/08/24 09:07	05/14/24 20:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*95*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:57*	*1*
o-Terphenyl	*90*		*70 - 130*	*05/08/24 09:07*	*05/14/24 20:57*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**14.0**		5.02		mg/Kg			05/10/24 20:51	1

Client Sample ID: SB-4 (1')

Lab Sample ID: 880-43226-13
Matrix: Solid
Date Collected: 05/07/24 10:40
Date Received: 05/08/24 10:57
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**4040**		990		mg/Kg			05/14/24 21:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<990	U	990		mg/Kg		05/08/24 09:07	05/14/24 21:14	20
Diesel Range Organics (Over C10-C28)	**4040**		990		mg/Kg		05/08/24 09:07	05/14/24 21:14	20
Oil Range Organics (Over C28-C36)	<990	U	990		mg/Kg		05/08/24 09:07	05/14/24 21:14	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*05/08/24 09:07*	*05/14/24 21:14*	*20*
o-Terphenyl	*109*		*70 - 130*	*05/08/24 09:07*	*05/14/24 21:14*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.97	U	4.97		mg/Kg			05/10/24 20:57	1

Client Sample ID: SB-4 (4.1')

Lab Sample ID: 880-43226-16
Matrix: Solid
Date Collected: 05/07/24 10:55
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5320**		249		mg/Kg			05/18/24 03:49	1

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-4 (4.1')

Lab Sample ID: 880-43226-16
Matrix: Solid
Date Collected: 05/07/24 10:55
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<249	U	249		mg/Kg		05/15/24 15:11	05/18/24 03:49	5
Diesel Range Organics (Over C10-C28)	**5320**		249		mg/Kg		05/15/24 15:11	05/18/24 03:49	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		05/15/24 15:11	05/18/24 03:49	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*128*		*70 - 130*	*05/15/24 15:11*	*05/18/24 03:49*	*5*
o-Terphenyl	*121*		*70 - 130*	*05/15/24 15:11*	*05/18/24 03:49*	*5*

Client Sample ID: SB-5 (1')

Lab Sample ID: 880-43226-18
Matrix: Solid
Date Collected: 05/07/24 11:10
Date Received: 05/08/24 10:57
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3690**		999		mg/Kg			05/14/24 21:31	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	<999	U	999		mg/Kg		05/08/24 09:07	05/14/24 21:31	20
Diesel Range Organics (Over C10-C28)	**3690**		999		mg/Kg		05/08/24 09:07	05/14/24 21:31	20
Oil Range Organics (Over C28-C36)	<999	U	999		mg/Kg		05/08/24 09:07	05/14/24 21:31	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*05/08/24 09:07*	*05/14/24 21:31*	*20*
o-Terphenyl	*111*		*70 - 130*	*05/08/24 09:07*	*05/14/24 21:31*	*20*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.03	U	5.03		mg/Kg			05/10/24 21:03	1

Client Sample ID: SB-5 (4.1')

Lab Sample ID: 880-43226-21
Matrix: Solid
Date Collected: 05/07/24 11:25
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**183**		49.8		mg/Kg			05/16/24 17:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		05/16/24 08:07	05/16/24 17:52	1
Diesel Range Organics (Over C10-C28)	**183**		49.8		mg/Kg		05/16/24 08:07	05/16/24 17:52	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/16/24 08:07	05/16/24 17:52	1

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-5 (4.1')

Lab Sample ID: 880-43226-21
Matrix: Solid
Date Collected: 05/07/24 11:25
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130	05/16/24 08:07	05/16/24 17:52	1
o-Terphenyl	116		70 - 130	05/16/24 08:07	05/16/24 17:52	1

Client Sample ID: SB-6 (1')

Lab Sample ID: 880-43226-22
Matrix: Solid
Date Collected: 05/07/24 10:10
Date Received: 05/08/24 10:57
Sample Depth: 1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**5910**		995		mg/Kg			05/14/24 21:48	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	<995	U	995		mg/Kg		05/08/24 09:07	05/14/24 21:48	20
Diesel Range Organics (Over C10-C28)	**5910**		995		mg/Kg		05/08/24 09:07	05/14/24 21:48	20
Oil Range Organics (Over C28-C36)	<995	U	995		mg/Kg		05/08/24 09:07	05/14/24 21:48	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	05/08/24 09:07	05/14/24 21:48	20
o-Terphenyl	195	S1+	70 - 130	05/08/24 09:07	05/14/24 21:48	20

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<4.99	U	4.99		mg/Kg			05/10/24 21:09	1

Client Sample ID: SB-6 (4.1')

Lab Sample ID: 880-43226-25
Matrix: Solid
Date Collected: 05/07/24 10:25
Date Received: 05/08/24 10:57
Sample Depth: 4.1'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**1880**		49.7		mg/Kg			05/16/24 17:31	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		05/16/24 08:07	05/16/24 17:31	1
Diesel Range Organics (Over C10-C28)	**1880**		49.7		mg/Kg		05/16/24 08:07	05/16/24 17:31	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/16/24 08:07	05/16/24 17:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	05/16/24 08:07	05/16/24 17:31	1
o-Terphenyl	98		70 - 130	05/16/24 08:07	05/16/24 17:31	1

Client Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-6 (6.5')

Lab Sample ID: 880-43226-26
Matrix: Solid
Date Collected: 05/07/24 10:28
Date Received: 05/08/24 10:57
Sample Depth: 6.5'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**3710**		249		mg/Kg			05/16/24 18:32	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	<249	U	249		mg/Kg		05/16/24 08:07	05/16/24 18:32	5
Diesel Range Organics (Over C10-C28)	**3710**		249		mg/Kg		05/16/24 08:07	05/16/24 18:32	5
Oil Range Organics (Over C28-C36)	<249	U	249		mg/Kg		05/16/24 08:07	05/16/24 18:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*123*		*70 - 130*	*05/16/24 08:07*	*05/16/24 18:32*	*5*
o-Terphenyl	*124*		*70 - 130*	*05/16/24 08:07*	*05/16/24 18:32*	*5*

Client Sample ID: SB-6 (9')

Lab Sample ID: 880-43226-27
Matrix: Solid
Date Collected: 05/07/24 10:32
Date Received: 05/08/24 10:57
Sample Depth: 9'

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**6740**		250		mg/Kg			05/16/24 18:12	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	<250	U	250		mg/Kg		05/16/24 08:07	05/16/24 18:12	5
Diesel Range Organics (Over C10-C28)	**6740**		250		mg/Kg		05/16/24 08:07	05/16/24 18:12	5
Oil Range Organics (Over C28-C36)	<250	U	250		mg/Kg		05/16/24 08:07	05/16/24 18:12	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*132*	*S1+*	*70 - 130*	*05/16/24 08:07*	*05/16/24 18:12*	*5*
o-Terphenyl	*126*		*70 - 130*	*05/16/24 08:07*	*05/16/24 18:12*	*5*

Surrogate Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
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)
880-43226-1	SB-1 (1')	95	93
880-43226-3	SB-1 (3')	199 S1+	128
880-43226-5	SB-2 (1')	224 S1+	122
880-43226-7	SB-2 (3')	140 S1+	126
880-43226-8	SB-2 (4.1')	97	103
880-43226-9	SB-3 (1')	191 S1+	123
880-43226-11	SB-3 (3')	246 S1+	112
LCS 880-80259/1-A	Lab Control Sample	103	99
LCS 880-80369/1-A	Lab Control Sample	116	101
LCSD 880-80259/2-A	Lab Control Sample Dup	89	86
LCSD 880-80369/2-A	Lab Control Sample Dup	115	129
MB 880-80259/5-A	Method Blank	66 S1-	99
MB 880-80327/5-A	Method Blank	114	90
MB 880-80369/5-A	Method Blank	116	89

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-43226-1	SB-1 (1')	153 S1+	176 S1+
880-43226-3	SB-1 (3')	116	106
880-43226-4	SB-1 (4.1')	97	93
880-43226-5	SB-2 (1')	134 S1+	266 S1+
880-43226-7	SB-2 (3')	95	100
880-43226-8	SB-2 (4.1')	88	85
880-43226-9	SB-3 (1')	116	128
880-43226-11	SB-3 (3')	102	137 S1+
880-43226-12	SB-3 (4.1')	95	90
880-43226-13	SB-4 (1')	99	109
880-43226-16	SB-4 (4.1')	128	121
880-43226-18	SB-5 (1')	111	111
880-43226-21	SB-5 (4.1')	114	116
880-43226-22	SB-6 (1')	113	195 S1+
880-43226-25	SB-6 (4.1')	113	98
880-43226-26	SB-6 (6.5')	123	124
880-43226-27	SB-6 (9')	132 S1+	126
LCS 880-80222/2-A	Lab Control Sample	93	95
LCS 880-80265/2-A	Lab Control Sample	85	87
LCS 880-80281/2-A	Lab Control Sample	84	81
LCS 880-80296/2-A	Lab Control Sample	101	93
LCS 880-80820/2-A	Lab Control Sample	108	94
LCS 880-80851/2-A	Lab Control Sample	102	91
LCSD 880-80222/3-A	Lab Control Sample Dup	90	92
LCSD 880-80265/3-A	Lab Control Sample Dup	84	86

Surrogate Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
LCSD 880-80281/3-A	Lab Control Sample Dup	98	97
LCSD 880-80296/3-A	Lab Control Sample Dup	102	95
LCSD 880-80820/3-A	Lab Control Sample Dup	104	92
LCSD 880-80851/3-A	Lab Control Sample Dup	101	91
MB 880-80222/1-A	Method Blank	88	88
MB 880-80265/1-A	Method Blank	84	83
MB 880-80281/1-A	Method Blank	113	125
MB 880-80296/1-A	Method Blank	115	127
MB 880-80820/1-A	Method Blank	105	112
MB 880-80851/1-A	Method Blank	102	112

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-80259/5-A
Matrix: Solid
Analysis Batch: 80207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80259

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/08/24 12:03	05/08/24 13:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/08/24 12:03	05/08/24 13:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/08/24 12:03	05/08/24 13:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/08/24 12:03	05/08/24 13:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/08/24 12:03	05/08/24 13:45	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/08/24 12:03	05/08/24 13:45	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*66*	*S1-*	*70 - 130*	*05/08/24 12:03*	*05/08/24 13:45*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*05/08/24 12:03*	*05/08/24 13:45*	*1*

Lab Sample ID: LCS 880-80259/1-A
Matrix: Solid
Analysis Batch: 80207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80259

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1096		mg/Kg		110	70 - 130
Toluene	0.100	0.1101		mg/Kg		110	70 - 130
Ethylbenzene	0.100	0.1064		mg/Kg		106	70 - 130
m-Xylene & p-Xylene	0.200	0.2181		mg/Kg		109	70 - 130
o-Xylene	0.100	0.1094		mg/Kg		109	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: LCSD 880-80259/2-A
Matrix: Solid
Analysis Batch: 80207

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80259

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.08839		mg/Kg		88	70 - 130	21	35
Toluene	0.100	0.08924		mg/Kg		89	70 - 130	21	35
Ethylbenzene	0.100	0.08586		mg/Kg		86	70 - 130	21	35
m-Xylene & p-Xylene	0.200	0.1765		mg/Kg		88	70 - 130	21	35
o-Xylene	0.100	0.08983		mg/Kg		90	70 - 130	20	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: MB 880-80327/5-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/09/24 08:53	05/09/24 11:21	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/09/24 08:53	05/09/24 11:21	1

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-80327/5-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80327

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/09/24 08:53	05/09/24 11:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/09/24 08:53	05/09/24 11:21	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/09/24 08:53	05/09/24 11:21	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/09/24 08:53	05/09/24 11:21	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*05/09/24 08:53*	*05/09/24 11:21*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*05/09/24 08:53*	*05/09/24 11:21*	*1*

Lab Sample ID: MB 880-80369/5-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80369

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/09/24 14:16	05/09/24 22:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/09/24 14:16	05/09/24 22:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/09/24 14:16	05/09/24 22:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		05/09/24 14:16	05/09/24 22:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/09/24 14:16	05/09/24 22:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/09/24 14:16	05/09/24 22:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*05/09/24 14:16*	*05/09/24 22:58*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*05/09/24 14:16*	*05/09/24 22:58*	*1*

Lab Sample ID: LCS 880-80369/1-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80369

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1211		mg/Kg		121	70 - 130		
Toluene			0.100	0.1163		mg/Kg		116	70 - 130		
Ethylbenzene			0.100	0.1130		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2327		mg/Kg		116	70 - 130		
o-Xylene			0.100	0.1166		mg/Kg		117	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-80369/2-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80369

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.2480	*+ *1	mg/Kg		248	70 - 130	69	35
Toluene			0.100	0.2524	*+ *1	mg/Kg		252	70 - 130	74	35
Ethylbenzene			0.100	0.2532	*+ *1	mg/Kg		253	70 - 130	77	35

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-80369/2-A
Matrix: Solid
Analysis Batch: 80320

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80369

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m-Xylene & p-Xylene			0.200	0.5027	*+ *1	mg/Kg		251	70 - 130	73	35
o-Xylene			0.100	0.2511	*+ *1	mg/Kg		251	70 - 130	73	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*115*		*70 - 130*
1,4-Difluorobenzene (Surr)	*129*		*70 - 130*

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

Lab Sample ID: MB 880-80222/1-A
Matrix: Solid
Analysis Batch: 80690

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80222

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		05/08/24 09:06	05/14/24 10:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/08/24 09:06	05/14/24 10:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/08/24 09:06	05/14/24 10:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*88*		*70 - 130*	*05/08/24 09:06*	*05/14/24 10:03*	*1*
o-Terphenyl	*88*		*70 - 130*	*05/08/24 09:06*	*05/14/24 10:03*	*1*

Lab Sample ID: LCS 880-80222/2-A
Matrix: Solid
Analysis Batch: 80690

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80222

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1037		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)			1000	884.6		mg/Kg		88	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*93*		*70 - 130*
o-Terphenyl	*95*		*70 - 130*

Lab Sample ID: LCSD 880-80222/3-A
Matrix: Solid
Analysis Batch: 80690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80222

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	981.8		mg/Kg		98	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	853.6		mg/Kg		85	70 - 130	4	20

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: LCSD 880-80222/3-A
Matrix: Solid
Analysis Batch: 80690

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80222

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*90*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: MB 880-80265/1-A
Matrix: Solid
Analysis Batch: 80694

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80265

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		05/08/24 13:27	05/14/24 10:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/08/24 13:27	05/14/24 10:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/08/24 13:27	05/14/24 10:03	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*05/08/24 13:27*	*05/14/24 10:03*	*1*
o-Terphenyl	*83*		*70 - 130*	*05/08/24 13:27*	*05/14/24 10:03*	*1*

Lab Sample ID: LCS 880-80265/2-A
Matrix: Solid
Analysis Batch: 80694

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80265

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	879.9		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	793.4		mg/Kg		79	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*85*		*70 - 130*
o-Terphenyl	*87*		*70 - 130*

Lab Sample ID: LCSD 880-80265/3-A
Matrix: Solid
Analysis Batch: 80694

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80265

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	867.0		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	774.7		mg/Kg		77	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*86*		*70 - 130*

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-80281/1-A
Matrix: Solid
Analysis Batch: 80522

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80281

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		05/08/24 16:20	05/12/24 01:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/08/24 16:20	05/12/24 01:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/08/24 16:20	05/12/24 01:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*05/08/24 16:20*	*05/12/24 01:19*	*1*
o-Terphenyl	*125*		*70 - 130*	*05/08/24 16:20*	*05/12/24 01:19*	*1*

Lab Sample ID: LCS 880-80281/2-A
Matrix: Solid
Analysis Batch: 80522

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80281

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	863.8		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	825.4		mg/Kg		83	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*84*		*70 - 130*
o-Terphenyl	*81*		*70 - 130*

Lab Sample ID: LCSD 880-80281/3-A
Matrix: Solid
Analysis Batch: 80522

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80281

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	980.2		mg/Kg		98	70 - 130	13	20
Diesel Range Organics (Over C10-C28)	1000	918.2		mg/Kg		92	70 - 130	11	20

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

Lab Sample ID: MB 880-80296/1-A
Matrix: Solid
Analysis Batch: 80414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80296

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		05/08/24 16:52	05/10/24 19:36	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/08/24 16:52	05/10/24 19:36	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/08/24 16:52	05/10/24 19:36	1

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: MB 880-80296/1-A
Matrix: Solid
Analysis Batch: 80414

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80296

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115		70 - 130	05/08/24 16:52	05/10/24 19:36	1
o-Terphenyl	127		70 - 130	05/08/24 16:52	05/10/24 19:36	1

Lab Sample ID: LCS 880-80296/2-A
Matrix: Solid
Analysis Batch: 80414

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80296

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1146		mg/Kg		115	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	966.0		mg/Kg		97	70 - 130		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	101		70 - 130
o-Terphenyl	93		70 - 130

Lab Sample ID: LCSD 880-80296/3-A
Matrix: Solid
Analysis Batch: 80414

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80296

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1157		mg/Kg		116	70 - 130	1	20
Diesel Range Organics (Over C10-C28)			1000	973.8		mg/Kg		97	70 - 130	1	20

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

Lab Sample ID: MB 880-80820/1-A
Matrix: Solid
Analysis Batch: 80929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80820

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		05/15/24 15:10	05/17/24 19:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/15/24 15:10	05/17/24 19:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/15/24 15:10	05/17/24 19:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	05/15/24 15:10	05/17/24 19:20	1
o-Terphenyl	112		70 - 130	05/15/24 15:10	05/17/24 19:20	1

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: LCS 880-80820/2-A
Matrix: Solid
Analysis Batch: 80929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	977.0		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)	1000	910.8		mg/Kg		91	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*94*		*70 - 130*

Lab Sample ID: LCSD 880-80820/3-A
Matrix: Solid
Analysis Batch: 80929

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80820

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	975.3		mg/Kg		98	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	891.6		mg/Kg		89	70 - 130	2	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*92*		*70 - 130*

Lab Sample ID: MB 880-80851/1-A
Matrix: Solid
Analysis Batch: 80845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 80851

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		05/16/24 08:07	05/16/24 08:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/16/24 08:07	05/16/24 08:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/16/24 08:07	05/16/24 08:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*05/16/24 08:07*	*05/16/24 08:40*	*1*
o-Terphenyl	*112*		*70 - 130*	*05/16/24 08:07*	*05/16/24 08:40*	*1*

Lab Sample ID: LCS 880-80851/2-A
Matrix: Solid
Analysis Batch: 80845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80851

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	913.4		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	1000	823.6		mg/Kg		82	70 - 130

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

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

Lab Sample ID: LCS 880-80851/2-A
Matrix: Solid
Analysis Batch: 80845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 80851

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*102*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Lab Sample ID: LCSD 880-80851/3-A
Matrix: Solid
Analysis Batch: 80845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 80851

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	862.8		mg/Kg		86	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	795.0		mg/Kg		80	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*101*		*70 - 130*
o-Terphenyl	*91*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-80266/1-A
Matrix: Solid
Analysis Batch: 80268

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			05/09/24 00:18	1

Lab Sample ID: LCS 880-80266/2-A
Matrix: Solid
Analysis Batch: 80268

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	259.6		mg/Kg		104	90 - 110

Lab Sample ID: LCSD 880-80266/3-A
Matrix: Solid
Analysis Batch: 80268

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	260.2		mg/Kg		104	90 - 110	0	20

Lab Sample ID: MB 880-80288/1-A
Matrix: Solid
Analysis Batch: 80325

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			05/10/24 19:35	1

QC Sample Results

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-80288/2-A
Matrix: Solid
Analysis Batch: 80325

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	234.7		mg/Kg		94	90 - 110		

Lab Sample ID: LCSD 880-80288/3-A
Matrix: Solid
Analysis Batch: 80325

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	233.5		mg/Kg		93	90 - 110	1	20

Lab Sample ID: 880-43226-5 MS
Matrix: Solid
Analysis Batch: 80325

Client Sample ID: SB-2 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	175		249	406.4		mg/Kg		93	90 - 110		

Lab Sample ID: 880-43226-5 MSD
Matrix: Solid
Analysis Batch: 80325

Client Sample ID: SB-2 (1')
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	175		249	406.5		mg/Kg		93	90 - 110	0	20

QC Association Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

GC VOA

Analysis Batch: 80207

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	8021B	80259
880-43226-8	SB-2 (4.1')	Total/NA	Solid	8021B	80259
MB 880-80259/5-A	Method Blank	Total/NA	Solid	8021B	80259
LCS 880-80259/1-A	Lab Control Sample	Total/NA	Solid	8021B	80259
LCSD 880-80259/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	80259

Prep Batch: 80259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	5035	
880-43226-8	SB-2 (4.1')	Total/NA	Solid	5035	
MB 880-80259/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-80259/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-80259/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 80320

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-3	SB-1 (3')	Total/NA	Solid	8021B	80369
880-43226-5	SB-2 (1')	Total/NA	Solid	8021B	80369
880-43226-7	SB-2 (3')	Total/NA	Solid	8021B	80369
880-43226-9	SB-3 (1')	Total/NA	Solid	8021B	80369
880-43226-11	SB-3 (3')	Total/NA	Solid	8021B	80369
MB 880-80327/5-A	Method Blank	Total/NA	Solid	8021B	80327
MB 880-80369/5-A	Method Blank	Total/NA	Solid	8021B	80369
LCS 880-80369/1-A	Lab Control Sample	Total/NA	Solid	8021B	80369
LCSD 880-80369/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	80369

Prep Batch: 80327

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-80327/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 80369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-3	SB-1 (3')	Total/NA	Solid	5035	
880-43226-5	SB-2 (1')	Total/NA	Solid	5035	
880-43226-7	SB-2 (3')	Total/NA	Solid	5035	
880-43226-9	SB-3 (1')	Total/NA	Solid	5035	
880-43226-11	SB-3 (3')	Total/NA	Solid	5035	
MB 880-80369/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-80369/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-80369/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 80378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	Total BTEX	
880-43226-3	SB-1 (3')	Total/NA	Solid	Total BTEX	
880-43226-5	SB-2 (1')	Total/NA	Solid	Total BTEX	
880-43226-7	SB-2 (3')	Total/NA	Solid	Total BTEX	
880-43226-8	SB-2 (4.1')	Total/NA	Solid	Total BTEX	
880-43226-9	SB-3 (1')	Total/NA	Solid	Total BTEX	
880-43226-11	SB-3 (3')	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

GC Semi VOA

Prep Batch: 80222

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-8	SB-2 (4.1')	Total/NA	Solid	8015NM Prep	
880-43226-9	SB-3 (1')	Total/NA	Solid	8015NM Prep	
880-43226-11	SB-3 (3')	Total/NA	Solid	8015NM Prep	
880-43226-12	SB-3 (4.1')	Total/NA	Solid	8015NM Prep	
880-43226-13	SB-4 (1')	Total/NA	Solid	8015NM Prep	
880-43226-18	SB-5 (1')	Total/NA	Solid	8015NM Prep	
880-43226-22	SB-6 (1')	Total/NA	Solid	8015NM Prep	
MB 880-80222/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80222/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 80265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-4	SB-1 (4.1')	Total/NA	Solid	8015NM Prep	
880-43226-5	SB-2 (1')	Total/NA	Solid	8015NM Prep	
880-43226-7	SB-2 (3')	Total/NA	Solid	8015NM Prep	
MB 880-80265/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80265/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 80281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	8015NM Prep	
MB 880-80281/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80281/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80281/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Prep Batch: 80296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-3	SB-1 (3')	Total/NA	Solid	8015NM Prep	
MB 880-80296/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80296/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80296/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 80414

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-3	SB-1 (3')	Total/NA	Solid	8015B NM	80296
MB 880-80296/1-A	Method Blank	Total/NA	Solid	8015B NM	80296
LCS 880-80296/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80296
LCSD 880-80296/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80296

Analysis Batch: 80522

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	8015B NM	80281
MB 880-80281/1-A	Method Blank	Total/NA	Solid	8015B NM	80281
LCS 880-80281/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80281
LCSD 880-80281/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80281

Analysis Batch: 80598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

GC Semi VOA (Continued)

Analysis Batch: 80598 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-3	SB-1 (3')	Total/NA	Solid	8015 NM	
880-43226-4	SB-1 (4.1')	Total/NA	Solid	8015 NM	
880-43226-5	SB-2 (1')	Total/NA	Solid	8015 NM	
880-43226-7	SB-2 (3')	Total/NA	Solid	8015 NM	
880-43226-8	SB-2 (4.1')	Total/NA	Solid	8015 NM	
880-43226-9	SB-3 (1')	Total/NA	Solid	8015 NM	
880-43226-11	SB-3 (3')	Total/NA	Solid	8015 NM	
880-43226-12	SB-3 (4.1')	Total/NA	Solid	8015 NM	
880-43226-13	SB-4 (1')	Total/NA	Solid	8015 NM	
880-43226-16	SB-4 (4.1')	Total/NA	Solid	8015 NM	
880-43226-18	SB-5 (1')	Total/NA	Solid	8015 NM	
880-43226-21	SB-5 (4.1')	Total/NA	Solid	8015 NM	
880-43226-22	SB-6 (1')	Total/NA	Solid	8015 NM	
880-43226-25	SB-6 (4.1')	Total/NA	Solid	8015 NM	
880-43226-26	SB-6 (6.5')	Total/NA	Solid	8015 NM	
880-43226-27	SB-6 (9')	Total/NA	Solid	8015 NM	

Analysis Batch: 80690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-8	SB-2 (4.1')	Total/NA	Solid	8015B NM	80222
880-43226-9	SB-3 (1')	Total/NA	Solid	8015B NM	80222
880-43226-11	SB-3 (3')	Total/NA	Solid	8015B NM	80222
880-43226-12	SB-3 (4.1')	Total/NA	Solid	8015B NM	80222
880-43226-13	SB-4 (1')	Total/NA	Solid	8015B NM	80222
880-43226-18	SB-5 (1')	Total/NA	Solid	8015B NM	80222
880-43226-22	SB-6 (1')	Total/NA	Solid	8015B NM	80222
MB 880-80222/1-A	Method Blank	Total/NA	Solid	8015B NM	80222
LCS 880-80222/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80222
LCSD 880-80222/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80222

Analysis Batch: 80694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-4	SB-1 (4.1')	Total/NA	Solid	8015B NM	80265
880-43226-5	SB-2 (1')	Total/NA	Solid	8015B NM	80265
880-43226-7	SB-2 (3')	Total/NA	Solid	8015B NM	80265
MB 880-80265/1-A	Method Blank	Total/NA	Solid	8015B NM	80265
LCS 880-80265/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80265
LCSD 880-80265/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80265

Prep Batch: 80820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-16	SB-4 (4.1')	Total/NA	Solid	8015NM Prep	
MB 880-80820/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80820/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80820/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 80845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-21	SB-5 (4.1')	Total/NA	Solid	8015B NM	80851
880-43226-25	SB-6 (4.1')	Total/NA	Solid	8015B NM	80851
880-43226-26	SB-6 (6.5')	Total/NA	Solid	8015B NM	80851

QC Association Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

GC Semi VOA (Continued)

Analysis Batch: 80845 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-27	SB-6 (9')	Total/NA	Solid	8015B NM	80851
MB 880-80851/1-A	Method Blank	Total/NA	Solid	8015B NM	80851
LCS 880-80851/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80851
LCSD 880-80851/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80851

Prep Batch: 80851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-21	SB-5 (4.1')	Total/NA	Solid	8015NM Prep	
880-43226-25	SB-6 (4.1')	Total/NA	Solid	8015NM Prep	
880-43226-26	SB-6 (6.5')	Total/NA	Solid	8015NM Prep	
880-43226-27	SB-6 (9')	Total/NA	Solid	8015NM Prep	
MB 880-80851/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-80851/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-80851/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 80929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-16	SB-4 (4.1')	Total/NA	Solid	8015B NM	80820
MB 880-80820/1-A	Method Blank	Total/NA	Solid	8015B NM	80820
LCS 880-80820/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	80820
LCSD 880-80820/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	80820

HPLC/IC

Leach Batch: 80266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Soluble	Solid	DI Leach	
880-43226-3	SB-1 (3')	Soluble	Solid	DI Leach	
880-43226-4	SB-1 (4.1')	Soluble	Solid	DI Leach	
MB 880-80266/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-80266/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-80266/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Analysis Batch: 80268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-1	SB-1 (1')	Soluble	Solid	300.0	80266
880-43226-3	SB-1 (3')	Soluble	Solid	300.0	80266
880-43226-4	SB-1 (4.1')	Soluble	Solid	300.0	80266
MB 880-80266/1-A	Method Blank	Soluble	Solid	300.0	80266
LCS 880-80266/2-A	Lab Control Sample	Soluble	Solid	300.0	80266
LCSD 880-80266/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	80266

Leach Batch: 80288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-5	SB-2 (1')	Soluble	Solid	DI Leach	
880-43226-7	SB-2 (3')	Soluble	Solid	DI Leach	
880-43226-8	SB-2 (4.1')	Soluble	Solid	DI Leach	
880-43226-9	SB-3 (1')	Soluble	Solid	DI Leach	
880-43226-11	SB-3 (3')	Soluble	Solid	DI Leach	
880-43226-12	SB-3 (4.1')	Soluble	Solid	DI Leach	
880-43226-13	SB-4 (1')	Soluble	Solid	DI Leach	

QC Association Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

HPLC/IC (Continued)

Leach Batch: 80288 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-18	SB-5 (1')	Soluble	Solid	DI Leach	
880-43226-22	SB-6 (1')	Soluble	Solid	DI Leach	
MB 880-80288/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-80288/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-80288/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-43226-5 MS	SB-2 (1')	Soluble	Solid	DI Leach	
880-43226-5 MSD	SB-2 (1')	Soluble	Solid	DI Leach	

Analysis Batch: 80325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-43226-5	SB-2 (1')	Soluble	Solid	300.0	80288
880-43226-7	SB-2 (3')	Soluble	Solid	300.0	80288
880-43226-8	SB-2 (4.1')	Soluble	Solid	300.0	80288
880-43226-9	SB-3 (1')	Soluble	Solid	300.0	80288
880-43226-11	SB-3 (3')	Soluble	Solid	300.0	80288
880-43226-12	SB-3 (4.1')	Soluble	Solid	300.0	80288
880-43226-13	SB-4 (1')	Soluble	Solid	300.0	80288
880-43226-18	SB-5 (1')	Soluble	Solid	300.0	80288
880-43226-22	SB-6 (1')	Soluble	Solid	300.0	80288
MB 880-80288/1-A	Method Blank	Soluble	Solid	300.0	80288
LCS 880-80288/2-A	Lab Control Sample	Soluble	Solid	300.0	80288
LCSD 880-80288/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	80288
880-43226-5 MS	SB-2 (1')	Soluble	Solid	300.0	80288
880-43226-5 MSD	SB-2 (1')	Soluble	Solid	300.0	80288

Lab Chronicle

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-1 (1')
Date Collected: 05/07/24 08:40
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	80259	05/08/24 14:21	AA	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	80207	05/08/24 18:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/08/24 18:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/12/24 10:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	80281	05/08/24 16:20	EL	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	80522	05/12/24 10:04	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	80266	05/08/24 13:47	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80268	05/09/24 02:51	SMC	EET MID

Client Sample ID: SB-1 (3')
Date Collected: 05/07/24 08:55
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-3
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			4.99 g	5 mL	80369	05/09/24 14:16	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	80320	05/10/24 04:59	SM	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/10/24 04:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/11/24 03:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	80296	05/08/24 16:52	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80414	05/11/24 03:47	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	80266	05/08/24 13:47	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80268	05/09/24 02:56	SMC	EET MID

Client Sample ID: SB-1 (4.1')
Date Collected: 05/07/24 09:04
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-4
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			80598	05/14/24 21:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	80265	05/08/24 13:27	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80694	05/14/24 21:14	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	80266	05/08/24 13:47	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80268	05/09/24 03:02	SMC	EET MID

Client Sample ID: SB-2 (1')
Date Collected: 05/07/24 09:10
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-5
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			5.02 g	5 mL	80369	05/09/24 14:16	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	80320	05/10/24 05:19	SM	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/10/24 05:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/14/24 21:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	80265	05/08/24 13:27	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80694	05/14/24 21:31	TKC	EET MID

Eurofins Midland

Lab Chronicle

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-2 (1')
Date Collected: 05/07/24 09:10
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-5
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	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 19:54	SMC	EET MID

Client Sample ID: SB-2 (3')
Date Collected: 05/07/24 09:20
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	80369	05/09/24 14:16	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	80320	05/10/24 05:40	SM	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/10/24 05:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/14/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	80265	05/08/24 13:27	EL	EET MID
Total/NA	Analysis	8015B NM		10	1 uL	1 uL	80694	05/14/24 21:48	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:13	SMC	EET MID

Client Sample ID: SB-2 (4.1')
Date Collected: 05/07/24 09:25
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	80259	05/08/24 14:21	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	80207	05/08/24 17:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/08/24 17:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/14/24 20:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80690	05/14/24 20:07	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:19	SMC	EET MID

Client Sample ID: SB-3 (1')
Date Collected: 05/07/24 09:35
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	80369	05/09/24 14:16	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	80320	05/10/24 06:00	SM	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/10/24 06:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/14/24 20:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80690	05/14/24 20:23	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:25	SMC	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-3 (3')
Date Collected: 05/07/24 09:45
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	80369	05/09/24 14:16	MNR	EET MID
Total/NA	Analysis	8021B		20	5 mL	5 mL	80320	05/10/24 06:21	SM	EET MID
Total/NA	Analysis	Total BTEX		1			80378	05/10/24 06:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			80598	05/14/24 20:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80690	05/14/24 20:40	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:32	SMC	EET MID

Client Sample ID: SB-3 (4.1')
Date Collected: 05/07/24 09:50
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			80598	05/14/24 20:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80690	05/14/24 20:57	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:51	SMC	EET MID

Client Sample ID: SB-4 (1')
Date Collected: 05/07/24 10:40
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			80598	05/14/24 21:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.10 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80690	05/14/24 21:14	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 20:57	SMC	EET MID

Client Sample ID: SB-4 (4.1')
Date Collected: 05/07/24 10:55
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-16
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			80598	05/18/24 03:49	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	80820	05/15/24 15:11	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	80929	05/18/24 03:49	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-5 (1')
Lab Sample ID: 880-43226-18
Date Collected: 05/07/24 11:10
Matrix: Solid
Date Received: 05/08/24 10:57

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			80598	05/14/24 21:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80690	05/14/24 21:31	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 21:03	SMC	EET MID

Client Sample ID: SB-5 (4.1')
Lab Sample ID: 880-43226-21
Date Collected: 05/07/24 11:25
Matrix: Solid
Date Received: 05/08/24 10:57

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			80598	05/16/24 17:52	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	80851	05/16/24 08:07	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80845	05/16/24 17:52	SM	EET MID

Client Sample ID: SB-6 (1')
Lab Sample ID: 880-43226-22
Date Collected: 05/07/24 10:10
Matrix: Solid
Date Received: 05/08/24 10:57

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			80598	05/14/24 21:48	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	80222	05/08/24 09:07	EL	EET MID
Total/NA	Analysis	8015B NM		20	1 uL	1 uL	80690	05/14/24 21:48	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	80288	05/08/24 16:43	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	80325	05/10/24 21:09	SMC	EET MID

Client Sample ID: SB-6 (4.1')
Lab Sample ID: 880-43226-25
Date Collected: 05/07/24 10:25
Matrix: Solid
Date Received: 05/08/24 10:57

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			80598	05/16/24 17:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	80851	05/16/24 08:07	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	80845	05/16/24 17:31	SM	EET MID

Client Sample ID: SB-6 (6.5')
Lab Sample ID: 880-43226-26
Date Collected: 05/07/24 10:28
Matrix: Solid
Date Received: 05/08/24 10:57

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			80598	05/16/24 18:32	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	80851	05/16/24 08:07	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	80845	05/16/24 18:32	SM	EET MID

Lab Chronicle

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Client Sample ID: SB-6 (9')

Date Collected: 05/07/24 10:32
Date Received: 05/08/24 10:57

Lab Sample ID: 880-43226-27

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			80598	05/16/24 18:12	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	80851	05/16/24 08:07	EL	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	80845	05/16/24 18:12	SM	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
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

Method Summary

Client: Crain Environmental
Project/Site: Tom Closson #1

Job ID: 880-43226-1
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: Tom Closson #1

Job ID: 880-43226-1
SDG: Lea Co., NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-43226-1	SB-1 (1')	Solid	05/07/24 08:40	05/08/24 10:57	1'
880-43226-3	SB-1 (3')	Solid	05/07/24 08:55	05/08/24 10:57	3'
880-43226-4	SB-1 (4.1')	Solid	05/07/24 09:04	05/08/24 10:57	4.1'
880-43226-5	SB-2 (1')	Solid	05/07/24 09:10	05/08/24 10:57	1'
880-43226-7	SB-2 (3')	Solid	05/07/24 09:20	05/08/24 10:57	3'
880-43226-8	SB-2 (4.1')	Solid	05/07/24 09:25	05/08/24 10:57	4.1'
880-43226-9	SB-3 (1')	Solid	05/07/24 09:35	05/08/24 10:57	1'
880-43226-11	SB-3 (3')	Solid	05/07/24 09:45	05/08/24 10:57	3'
880-43226-12	SB-3 (4.1')	Solid	05/07/24 09:50	05/08/24 10:57	4.1'
880-43226-13	SB-4 (1')	Solid	05/07/24 10:40	05/08/24 10:57	1'
880-43226-16	SB-4 (4.1')	Solid	05/07/24 10:55	05/08/24 10:57	4.1'
880-43226-18	SB-5 (1')	Solid	05/07/24 11:10	05/08/24 10:57	1'
880-43226-21	SB-5 (4.1')	Solid	05/07/24 11:25	05/08/24 10:57	4.1'
880-43226-22	SB-6 (1')	Solid	05/07/24 10:10	05/08/24 10:57	1'
880-43226-25	SB-6 (4.1')	Solid	05/07/24 10:25	05/08/24 10:57	4.1'
880-43226-26	SB-6 (6.5')	Solid	05/07/24 10:28	05/08/24 10:57	6.5'
880-43226-27	SB-6 (9')	Solid	05/07/24 10:32	05/08/24 10:57	9'

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Chain of Custody

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

880-43226 Chain of Custody

Project Manager:	Cindy Crain	Bill to: (if different)	Billy Moore (432)770-4217
Company Name:	Crain Environmental	Company Name:	FAE II
Address:	2925 E. 17th St.	Address:	11757 Katy Frwy, Ste. 725
City, State ZIP:	Odessa, TX 79761	City, State ZIP:	Houston, TX 77079
Phone:	(575) 441-7244 Email:	Email:	Cindy.crain@gmail.com; billy@faenergyus.com

Work Order Comments

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

Project Name:	Tom Closson #1	Turn Around	
Project Number:	—	☒ Routine ☐ Rush	
Project Location:	Lea Co., NM	Due Date:	
Sampler's Name:	Cindy Crain	TAT starts the day received by the lab, if received by 4.30pm	
PO #	—		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR8
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.5

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	TPH 8015M	Chlorides	BTEX	HOLD	Sample Comments
SB-1 (1')	S	5/7/24	0840	1'	G	1		X	X	X		
SB-1 (2')			0845	2'							X	
SB-1 (3')			0855	3'				X	X	X		
SB-1 (4.1')			0904	4.1'				X	X	X		
SB-2 (1')			0910	1'				X	X	X		
SB-2 (2')			0915	2'							X	
SB-2 (3')			0920	3'				X	X	X		
SB-2 (4.1')			0925	4.1'				X	X	X		
SB-3 (1')			0935	1'				X	X	X		
SB-3 (2')	↓	↓	0940	2'	↓	↓					X	

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Cindy Crain		5/8/24 1057	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev 2020.2

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Chain of Custody

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

Work Order No: 432246

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

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

Project Name:	Tom Closson #1	Turn Around	
Project Number:	–	☒ Routine ☐ Rush	
Project Location	Lea Co. NM	Due Date:	
Sampler's Name:	Cindy Crain	TAT starts the day received by the lab, if received by 4.30pm	
PO #	–		

SAMPLE RECEIPT			
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	IR6
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-1
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.6
Total Containers:		Corrected Temperature:	1.5

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015 M	Chlorides	BTEX	HOLD	Sample Comments
SB-3 (3')	S	5/7/24	0945	3'	G	1		X	X	X		
SB-3 (4.1')			0950	4.1'				X	X	X		
SB-4 (1')			1040	1'				X	X			
SB-4 (2')			1045	2'							X	
SB-4 (3')			1050	3'							X	
SB-4 (4.1')			1055	4.1'							X	
SB-4 (9')			1058	9'							X	
SB-5 (1')			1110	1'				X	X			
SB-5 (2')			1115	2'							X	
SB-5 (3')	↓	↓	1120	3'	↓	↓					X	

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg 1631 / 245 1 / 7470 / 7471

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time		Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Cindy Crain		5/8/24 1057	2			
3				4			
5				6			

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: 43224

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

Work Order Comments

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

Project Name:	Tom Closson #1	Turn Around	
Project Number:	—	☒ Routine ☐ Rush	
Project Location	Lea Co. NM	Due Date:	
Sampler's Name:	Cindy Crain	TAT starts the day received by the lab, if received by 4:30pm	
PO #	—		

SAMPLE RECEIPT			
Samples Received Intact:	Temp Blank: Yes No	Wet Ice: Yes No	
Cooler Custody Seals.	Yes No N/A	Thermometer ID:	Gun
Sample Custody Seals:	Yes No N/A	Correction Factor:	-1
Total Containers.		Temperature Reading:	1.6
		Corrected Temperature:	1.5

Preservative Codes

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: TPH 8015M	Chlorides	HOLD	Sample Comments
SB-5 (4.1')	S	5/7/24	1125	4.1'	G	1				X	
SB-6 (1')			1010	1'				X	X		
SB-6 (2')			1015	2'						X	
SB-6 (3')			1020	3'						X	
SB-6 (4.1')			1025	4.1'						X	
SB-6 (6.5')			1028	6.5'						X	
SB-6 (9')	↓	↓	1032	9'	↓	↓				X	

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

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	Relinquished by (Signature)	Received by (Signature)	Date/Time	Relinquished by (Signature)	Received by (Signature)	Date/Time
1	Cindy Crain		5/8/24 1057	2		
3				4		
5				6		

Revised Date: 08/25/2020 Rev 2020.2

Login Sample Receipt Checklist

Client: Crain Environmental

Job Number: 880-43226-1
SDG Number: Lea Co., NM

Login Number: 43226
List Number: 1
Creator: Rodriguez, Leticia

List Source: Eurofins Midland

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

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 451863

QUESTIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Prerequisites	
Incident ID (n#)	**nAPP2228055393**
Incident Name	**NAPP2228055393 TOM CLOSSON BATTERY @ 0**
Incident Type	**Produced Water Release**
Incident Status	**Remediation Plan Received**

Location of Release Source *Please answer all the questions in this group.*	
Site Name	TOM CLOSSON BATTERY
Date Release Discovered	10/06/2022
Surface Owner	Private

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

Nature and Volume of Release *Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*	
Crude Oil Released (bbls) Details	Cause: Overflow - Tank, Pit, Etc. | Tank (Any) | Crude Oil | Released: 2 BBL | Recovered: 0 BBL | Lost: 2 BBL.
Produced Water Released (bbls) Details	Cause: Overflow - Tank, Pit, Etc. | Tank (Any) | Produced Water | Released: 15 BBL | Recovered: 0 BBL | Lost: 15 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)	Release Volume Calculations are for Incident nAPP2228055393 and do not include calculations for the area of historical impacts.

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS (continued)

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

Initial Response	
The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	*Not answered.*
Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.	

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

I hereby agree and sign off to the above statement	Name: Cindy Crain Email: cindy.crain@gmail.com Date: 04/14/2025

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS (continued)

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	Direct Measurement
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	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Greater than 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Greater than 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

Remediation Plan	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
Requesting a remediation plan approval with this submission	Yes
Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
Soil Contamination Sampling: (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	534
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	9720
GRO+DRO (EPA SW-846 Method 8015M)	8120
BTEX (EPA SW-846 Method 8021B or 8260B)	8.1
Benzene (EPA SW-846 Method 8021B or 8260B)	0
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
On what estimated date will the remediation commence	06/02/2025
On what date will (or did) the final sampling or liner inspection occur	05/30/2027
On what date will (or was) the remediation complete(d)	06/30/2027
What is the estimated surface area (in square feet) that will be reclaimed	396000
What is the estimated volume (in cubic yards) that will be reclaimed	75000
What is the estimated surface area (in square feet) that will be remediated	396000
What is the estimated volume (in cubic yards) that will be remediated	75000
These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.	
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and **off-site** disposal (i.e. dig and haul, hydrovac, etc.)	*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.)	Yes
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	*Not answered.*
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	*Not answered.*
Ground Water Abatement pursuant to 19.15.30 NMAC	*Not answered.*
OTHER (Non-listed remedial process)	*Not answered.*
Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: Cindy Crain Email: cindy.crain@gmail.com Date: 04/14/2025
The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.	

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QUESTIONS (continued)

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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QUESTIONS (continued)

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

QUESTIONS

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

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

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CONDITIONS

Operator: FAE II Operating LLC 11757 Katy Freeway, Suite 725 Houston, TX 77079	OGRID: 329326
	Action Number: 451863
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

CONDITIONS

Created By	Condition	Condition Date
nvelez	Remediation plan is approved as written and with the following conditions; 1. FAE II soil shredding method to remediate is approved for hydrogen peroxide application only. FAE II must provide proof (e.g. photo documentation) that a physical barrier will be used to eliminate the follow up vadose zone sampling during the soil shredding process. 2. Sampling frequency increase from 200 to 400 square feet per one (1) 5-point composite is approved for the excavation floor sampling. Sidewall confirmation sampling will remain at 200 square feet per one (1) 5-point composite. 3. Sample analysis will consist of Total Petroleum Hydrocarbons per US EPA Method 8015M and chlorides per US EPA Method 300.0 or SM4500 only. 4. FAE II has 120-days (September 5, 2025) to submit to OCD its appropriate or final remediation closure report. The responsible party may apply for additional time to submit the final closure report upon a showing of good cause as determined by the division.	5/8/2025