

# Deferral Request Report (Revised)

Snapping 12 CTB 2

NMOCD I.D. # nAPP2512029165

Eddy County, New Mexico

March 31, 2026 | Project No. KH247057

Prepared for:  
Devon Energy Production Company, LP  
5315 Buena Vista Dr.  
Carlsbad, NM 88220



Nationwide  
Terracon.com

- Facilities
- Environmental
- Geotechnical
- Materials



5847 50<sup>th</sup> Street  
Lubbock, TX 79424  
P (806) 300-0140  
F (806) 797-0947  
**Terracon.com**

March 31, 2026

Devon Energy Production Company, LP  
5315 Buena Vista Dr.  
Carlsbad, NM 88220

**Attn:** New Mexico Oil Conservation Division  
1220 South St. Francis Drive  
Santa Fe, New Mexico, NM 87505

**RE: Deferral Request Report (Revised)**  
Devon Energy Production Company, LP  
Snapping 12 CTB 2  
Unit F, Section 12, Township 26 South, Range 31 East  
32.060005°, -103.734905°  
Eddy County, New Mexico  
NMOCD Incident No. nAPP2512029165  
Terracon Project No. KH247057

Terracon Consultants, Inc. (Terracon) is pleased to submit this Revised Deferral Request Report on behalf of Devon Energy Production Company, LP (Devon) for the site referenced above. The report is prepared in accordance with the applicable New Mexico Oil Conservation Division (NMOCD) regulations governing Oil and Gas Releases, New Mexico Administrative Code (NMAC 19.15.29).

Between November 17, 2024, and April 30, 2025, four release incidents were reported at the Snapping 12 CTB 2 site. Notably:

- **Incident No. 1** (NMOCD No. nAPP2432333537) was concentrated beneath the vessels and production equipment area.
- **Incident No. 2** (NMOCD No. nAPP2508321694) was concentrated beneath the vessels and production equipment.
- **Incident No. 3** (NMOCD No. nAPP2508758656) encompassed the areas previously affected by Incidents 1 and 2.
- **Incident No. 4** (NMOCD No. nAPP2512029165) was concentrated within the pipe chase and the northern portion of the area impacted by Incident 3.

This report summarizes delineation activities, analytical results and remedial efforts for the four incidents listed above. Note that Incident No. 3 occurred over the same area as Incidents No. 1 and No.2, such that these three incidents were remediated as a single incident and are discussed together in this report.

A Release Area Map illustrating the spatial extent of all four incidents is provided in Exhibit 6. A chronological summary of the project history is included below for reference.

**Incident No. 1 (nAPP2432333537).** Estimated affected Area 955 square feet.

- **November 17, 2024:** Devon discovered a produced water release at Snapping 12 CTB 2.
- **November 18, 2024:** Devon reported a pinhole leak in a valve on the C-141, resulting in a release totaled 25 barrels (bbls): 20.0 bbls into containment and 5 bbls to the pad surface.

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



The fluids to containment were recovered. However, the C-141 states 23.0 bbls were recovered from containment, which does not align with the initial estimate of 20.0 bbls entering containment. The contained referenced is the steel foundation supporting the separator tank.

- **December 2, 2025:** Terracon investigated to define the horizontal and vertical extent of the release. The sample results were below applicable NMAC Table 1 criteria.

**Incident No. 2 (nAPP2508321694).** Estimated affected Area 1,145 square feet.

- **March 21, 2025:** Devon discovered a produced water release at Snapping 12 CTB 2.
- **March 25, 2025:** Devon reported that a pinhole leak developed on a water leg of a separator, resulting in the release of 11.0 bbls of produced water to the pad surface. Ten bbls were recovered and 1 bbl was lost. The sample results were below the applicable NMAC Table 1 criteria.

**Incident No. 3 (nAPP2508758656).** Estimated affected Area 4,580 square feet.

- **March 27, 2025:** Devon discovered a produced water release at Snapping 12 CTB 2.
- **March 31, 2025:** Devon reported that a pinhole leak developed on the dump line of 621 treater, resulting in a release of 22.0 bbls of produced water to the pad surface. Twenty 20 bbls were recovered.
- **April 8, 2025:** Terracon investigated to define the horizontal and vertical extent of the release.
- **September 19, 2025:** The area of soil exceeding NMAC Table 1 criteria impacted by incident 3 was excavated. A total of approximately 40 cubic yards of soil exceeding NMAC Table 1 criteria was disposed of at Delaware Basin facility.
- **October 8, 2025:** The excavation was backfilled.

**Incident No. 4 (nAPP2512029165).** Affected Area 1,200 square feet.

- **April 28, 2025:** Devon discovered a produced water release at Snapping 12 CTB 2.
- **April 30, 2025:** Devon reported that a separator developed a leak on a dump line, resulting in the release of 5.0 bbls of produced water to the pad surface.
- **May 22, 2025, June 13, 2025, and July 23, 2025:** Terracon site visits to complete horizontal and vertical delineation of the extent of the release.
- **September 19, 2025:** The area of soil exceeding NMAC Table 1 criteria was excavated. Approximately 2 cubic yards of affected soil were disposed of at Delaware Basin facility.
- **October 8, 2025:** The excavation was backfilled.
- **November 19, 2025:** The Deferral Request Report was submitted by Devon to the NMOCD.
- **December 26, 2025:** Via email the NMOCD denied the deferral request report for the following reasons.

## Summary of NMOCD Denial Items and Responses

### Item 1

- **Under the Site Characterization portion of the C-141 application, to the question, "What is the minimum distance, between the closest lateral extents of the release**

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



**and the following surface areas: Categorize the risk of this well/site being in karst geology”, was answered, “Low”. Referring to the Permian Basin Karst Sreas layer of the NMOCD Oil and Gas Map, This site is medium karst.**

- Response: The November 3, 2025 Deferral Request Report correctly evaluated the site as within an area of medium risk for karst and set site remediation standards using the medium risk categorization. The C-141 form Site Characterization section has been revised to reflect the corrected karst evaluation as “medium”.

#### Item 2

- **Under the Site Characterization portion of the C-141 application, to the question, “What is the minimum distance, between the closest lateral extents of the release and the following surface areas: An occupied permanent residence, school, hospital, institution, or church”, was answered: “Greater than 5 (mi.)”. According to Google Earth satellite imagery, there is a residence located .85 miles northeast of the site.**
- Response: The C-141 form Site Characterization section has been revised to reflect the corrected distance of “between 1/2 and 1 (mi)”.

#### Item 3

- **Under the Site Characterization portion of the C-141 application, to the question, “What is the minimum distance, between the closest lateral extents of the release and the following surface areas: A spring or private domestic fresh water well used by less than five households for domestic or stock water purposes, was answered, “Between 1 and 5 (mi)”. According to OSE Points of Diversion layer of the NMOCD Oil and Gas Map, C-02090 is located .73 miles northeast of the site and its Primary Purpose is a Domestic One Household well. The distance to all of the above site receptors are required to be updated under the site Characterization portion of the C-141 application during application resubmission and within the report itself.**
- Response: The C-141 form Site Characterization section has been revised to reflect the corrected distance of “between 1/2 and 1 (mi)”. With respect to the information in the report, we note that the report accurately indicated the site was not within 500 feet of a spring or a private, domestic fresh water well as required by 19.15.29.12 (C) (4) (c) (i) NMAC. Also, as required under 19.15.29.11 (A) (3) NMAC, the report accurately identified all known water sources within a half mile from the release. Please refer to Section 2.0 – Site Characteristics, for an evaluation of the distances required to determine the applicable Table 1 remediation criteria.

#### Item 4

- **The OCD considers Medium/High/Critical Karst areas as an “Unstable area” pursuant to 19.15.2.7.U(6). OCD Karst determination is based on available data, such as BLM’s online mapping tool. If the release has occurred in a Medium/High/Critical Karst area then it meets the definition of unstable and it must be treated as if occurred where depth to groundwater is less than 50 feet (see Table 1 of 19.15.29.12 NMAC). This pertains to all releases that occurred on or after 12/1/2024.**
- Response: A Desktop Karst Survey was conducted by Terracon, a BLM approved karst/cave contractor. ***The desktop study did not identify any suspect karst features within or around the area of the site and concluded that the karst risk onsite is low as described in the attached Karst Desktop Report (Appendix B). In addition, an karst aerial/pedestrian survey and a geophysical survey were conducted by a second BLM approved karst/cave contractor, Southwest Geophysical Consulting, LLC. The results from the karst aerial/pedestrian survey and a geophysical survey found “No karst features were located within the 200 meters of the spill delineation boundary” as described in the attached Environmental Karst Study Report dated February 23, 2026 (Appendix C).***



## Item 5

- **This site is located in a medium karst potential occurrence zone and OCD has recently reevaluated karst potential zones and will not approve deferrals in these areas as medium karst may cause an imminent risk to groundwater. The operator may choose to have karst surveys performed, by a BLM approved karst/cave contractor, in order to determine if karst features are present at the site. A desktop survey, aerial/pedestrian survey, AND a geophysical survey must be performed. If no karst features are located during any of the surveys, AND the geophysical survey shows no other indications of unstable ground, the closure criteria can be based on Table 1 Closure criteria found in 19.15.29 NMAC. Sites located on BLM or State Land Office (SLO) owned surface will need surface owner approval.**
- Response: A Desktop Karst Survey was conducted by Terracon, a BLM approved karst/cave contractor; ***the desktop study did not identify any suspect karst features within or around the area of the site and concluded that the karst risk onsite is low as described in the attached Karst Desktop Report (Appendix B).*** In addition, an karst aerial/pedestrian survey and a geophysical survey were conducted by a second BLM approved karst/cave contractor, Southwest Geophysical Consulting, LLC. The results from the karst aerial/pedestrian survey and a geophysical survey found ***"No karst features were located within the 200 meters of the spill delineation boundary"*** as described in the attached Environmental Karst Study Report dated February 23, 2026 (Appendix C).
- **5 continued) A certified civil engineer will need to evaluate the soil type and provide the minimum distance the excavation(s) needs to be from the equipment and how deep the excavation(s) can be prior to requesting a deferral. This document must be stamped by the engineer.**
- Response: Based on the results of the completed karst aerial/pedestrian and geophysical evaluation, no karst features were identified within 200 meters of the spill delineation boundary. Additionally, the depth to groundwater in the area is >80 feet bgs.
- Given these site conditions, it is Devon's opinion that a certified engineer's evaluation of the soil type is not warranted. If OCD requires an engineer's assessment regardless of the subsurface stability, Devon request clarification on the specific risk or regulatory requirement prompting this evaluation so that we may address it appropriately.

## Item 6

- **There is evidence of two excavations taking place, but photographic documentation of only one is attached. Include photographs of all remediation areas prior to backfill pursuant to 19.156.29.12.E NMAC.**
- Response: The photo log for the second area was inadvertently omitted from the previous report and is included in the attached Appendix A.

## Item 7

- **Full horizontal and vertical delineation must be completed. DS-3 collected on 4/8/25 had chlorides of 2,660 mg/kg at surface. Collect a surface delineation sample west of this location in order to show horizontal delineation there. DS-2 should be vertically delineated.**
- Response: Terracon returned to the site on March 10, 2026, and collected horizontal delineation sample DS-13 (0.5-1.0 ft), vertical delineation sample DS-14 (2.5-3.0 ft), DS-14 (5.5-6.0 FT) and DS-2 (9.0-9.5 ft). The results of these samples are discussed in Section 4 below. The laboratory analytical reports for these samples along with the chain of custody are provided in Appendix E.

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



## Item 8

- **Anytime a release originates in a lined containment that overfills, the lined containment's integrity must be verified with a liner inspection per 19.15.29.11.A.(5) NMAC. According to pg. 1 of report, nAPP243233537 requires a liner inspection to confirm it was able to contain fluids and that the containment itself does not require a deferral.**
- Response: The location does not have lined containment. The release was centered beneath the tank and largely contained within the steel foundation that supports the separator tank as shown in photographs 3 and 4 of Incident nAPP2508758656 (Appendix A). For Incident nAPP243233537, no photographs are available of the actual release because the produced water was recovered prior to the site visit.

## Item 9

- **Laboratory report is missing for CFS-1, CFS-2 and CWS-1 samples collected from the southern excavation shown on exhibit 8. Attach laboratory report. The only thing differentiating the northern samples from the southern samples is where you placed them on the excavation map: in the future don't duplicate samples names for the same release area, as they can easily be mixed up.**
- Response: The laboratory analytical reports for these samples along with the chain of custody are provided in Appendix E.

The total affected area of the four releases is estimated at 15,500 square feet to an average depth of approximately 4 feet below grade surface. The estimated volume of affected soil is 2,300 cubic yards. Affected soil in areas that were accessible to excavation equipment was excavated and disposed of off-site. Soil above remediation criteria as defined within Table 1 of New Mexico Administration Code (NMAC) 19.15.29.12 at Incident nAPP2512029165 remains in areas inaccessible to excavation equipment due to the presence of operational oil & gas equipment.

We believe the work described in the attached revised deferral request report completes NMAC 19.15.29.12 requirements for the site, and we respectfully request NMOCD consider deferral of the remediation of Incident No. nAPP2512029165 until the equipment is moved during other operations, or when the well or facility is plugged or abandoned. Terracon appreciates this opportunity to provide environmental services to Devon Energy Production Company, LP. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,

**Terracon**

Charles F. Smith  
 Senior Project Manager

John Grams, PG (TX)  
 Senior Geologist

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
Snapping 12 CTB 2 | Eddy County, New Mexico  
March 31, 2026 | Terracon Project No. KH247057



## Table of Contents

Table of Contents..... i

1.0 Site Information ..... 1-1

2.0 General Site Characteristics ..... 2-1

3.0 Regulatory Framework and Response Action Levels ..... 3-2

    Closure Criteria for Soils Impacted by a Release ..... 3-3

4.0 Site Assessment/Delineation ..... 4-3

5.0 Remediation and Confirmation Sampling Summary..... 5-4

6.0 Conclusions..... 6-6

### EXHIBITS

- Exhibit 1 – Topographic Map
- Exhibit 2 – Site Location Map
- Exhibit 3 – NMOSE Pod Location Map
- Exhibit 4 – Regulatory Criteria Map
- Exhibit 5 – Cave Karst Public UCP Map
- Exhibit 6 – Release Area Map
- Exhibit 7 – Delineation Sample Location Map
- Exhibit 8 – Confirmation Sample Location Map
- Exhibit 9 – Affected Area Map

### TABLES

- Table 1 – Delineation Sample Results
- Table 2 – Confirmation Sample Results
- Table 3 – Backfill Sample Results

### APPENDICES

- Appendix A – Photographic Log
- Appendix B – Desktop Karst Survey Report
- Appendix C – Aerial/Pedestrian and Geophysical Karst Survey Report
- Appendix D – NM State Well Plugging Report
- Appendix E – Laboratory Analytical Reports and Chain of Custody
- Appendix F – Terracon Standard of Care, Limitation, and Reliance

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



## 1.0 Site Information

The following table provides detailed information regarding the Remediation information for the on-pad produced water at the Snapping 12 CTB 2 site in Eddy County, New Mexico.

Required Information	Site information	
Responsible Party:	The site is operated by Devon Energy Production Company, LP. OGRID #: 6137	
Local Contact:	Contact: Mr. Jim Raley	P: (575) 689-7597 E: <a href="mailto:jim.raley@dvn.com">jim.raley@dvn.com</a>
Site Name API #	Snapping 12 CTB 2	
Facility Description:	Snapping 12 CTB 2, is a well location located in Eddy County, New Mexico. It is an area located within Unit F, Section 12, Township 26 South, Range 31 East, approximately 21 miles southeast of Malaga, New Mexico. The area around the site is predominantly undeveloped native Federal-owned pastureland. A Topographic Map and Site location Map are included in Exhibit 1, and Exhibit 2, respectively.	
Site Characteristics:	Relatively flat with drainage following the natural ground surface; sloping very gently southerly.	

## 2.0 General Site Characteristics

	Site Ranking Characteristics	
<b>Groundwater</b> NMOSE Pod Location Map (Exhibit 3)	<p><u>Boring Information:</u> (C-04644)</p> <p><u>Depth of Well:</u> 80 ft. bgs    <u>Depth to Water:</u> &gt;80 ft. bgs</p> <p><u>Distance to Well:</u> 0.23 miles to the northwest of pad</p> <p><u>Date Plugged:</u> The well was plugged on September 7, 2022. The original well report could not be located; however, the plugging report indicates the well was dry prior to plugging on September 7, 2022. The State of New Mexico Plugging Record is included as Appendix D.</p> <p><u>Groundwater Use:</u> Groundwater in the area of the site is predominantly used for agriculture, industrial, or domestic use.</p>	
<b>Surface Water Assessment (refer to Regulatory Criteria Map Exhibit 4)</b>	Distance to nearest significant watercourse	The nearest wetland identified in the area of the site is a freshwater emergent wetland located approximately 0.65 miles northwest of the site. The Pecos River is 13.5 miles southwest.

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



Site Ranking Characteristics		
YES	NO	
	NO	Within 300 feet of any continuously flowing watercourse or any other significant watercourse
	NO	Within 200 feet of any lakebed, sinkhole or playa lake
	NO	within 300 feet from an occupied permanent residence, school, hospital, institution or church
	NO	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	Within 1,000 feet of any fresh water well or spring
	NO	Within incorporated municipal boundaries or fresh water well field
	NO	Within 300 feet of a wetland
	NO	Within the area overlying a subsurface mine
	NO	Within an unstable area
	NO	Within a 100-year floodplain Comment: FEMA Flood Map indicates site is in Zone X, areas determined to be outside the 0.2 % annual chance floodplain.
<b>Karst Characterization</b>  Karst Desktop Review (Appendix B), Karst Aerial/Pedestrian & Geophysical Karst Report (Appendix C) and Cave Karst Public UCP Map – (Exhibit 5)		A review of geospatial data obtained from the Bureau of Land Management (BLM) Carlsbad Field Office website indicated that the site is within an area of medium risk for Karst formations. As a result of this designation, Terracon conducted a desktop karst review to evaluate for indication of karst features in the area of the site. The desktop study did not identify any suspect karst features within or around the area of the site and concluded that the karst risk onsite is low as described in the attached Karst Desktop Report (Appendix B). Additionally, in response to the denial, a karst aerial/pedestrian survey and a geophysical survey were conducted by Southwest Geophysical Consulting, LLC. The results from the this survey found <b>"No karst features were located within the 200 meters of the spill delineation boundary"</b> as described in the attached Environmental Karst Study Report dated February 23, 2026 (Appendix C). A Cave Karst Public UCP Map is included as Exhibit 5.

### 3.0

## Regulatory Framework and Response Action Levels

Oil and gas exploration and production facilities in New Mexico are generally regulated by the New Mexico Oil Conservation Division (NMOCD). Standards governing the remediation and reclamation of

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
 Snapping 12 CTB 2 | Eddy County, New Mexico  
 March 31, 2026 | Terracon Project No. KH247057



sites impacted by releases from oil and gas exploration and production activities are contained in 19.15.29 NMAC.

## Closure Criteria for Soils Impacted by a Release

The below table below lists the closure criteria for BTEX (includes benzene, toluene, ethylbenzene, and xylenes), benzene, chlorides and Total Petroleum Hydrocarbons (TPH) (GRO+DRO+ORO), as defined within Table 1 of New Mexico Administration Code (NMAC) 19.15.29.12 for releases where depth to water is between 51 feet and 100 feet bgs.:

Parameters	Closure Criteria	Analytical Method
Total Benzene, Toluene, Ethylbenzene and Xylenes (Total BTEX)	50 mg/kg	EPA Method 8021B
Benzene	10 mg/kg	EPA Method 8021B
Chlorides	10,000 mg/kg	EPA Method 300
Total Petroleum Hydrocarbons (TPH) GRO, DRO and ORO	2,500 mg/kg	EPA Method 8015M
TPH (GRO+DRO)	1,000 mg/kg	EPA Method 8015M

## 4.0 Site Assessment/Delineation

Site assessment activities were conducted from December 2, 2024, through July 23, 2025, to evaluate the extent of the impact resulting from the four releases.

### **Incident No. 1: NMOCD Incident No. nAPP2432333537**

The affected area was initially identified through visual observation and was then confirmed with field data and is estimated to be approximately 955 square feet. Twelve delineation samples from borings DS-H-01 through DS-H-04 were collected from depths of 0.5 feet and 2.5 feet bgs. Samples from borings DS-V-01 and DS-V-02 were collected from depths of 2.5 feet and 7.5 feet bgs. These soil samples were submitted for analysis of BTEX, Chlorides, and TPH. Delineation sample results for BTEX, Chloride and TPH in these samples were below applicable NMAC Table 1 criteria. Analytical results from this sampling are presented in Table 1, and laboratory analytical reports and chains of custody are provided in Appendix E.

### **Incident No. 2: NMOCD Incident No. nAPP2508321694**

The affected area was identified through visual observation and estimated to be approximately 1,145 square feet. Incident No. 3 occurred six days later before delineation could be completed for this release. Incident No. 3 encompassed the area impacted by Incident No. 2, rendering separate delineation unnecessary.

### **Incident No. 3: Incident No. nAPP2508758656**

The affected area was initially identified through visual observation. The affected area was confirmed with soil sampling and was estimated to be approximately 4,580 square feet. Thirteen delineation samples from locations DS-1 through DS-12 were collected using a hand auger. These soil samples were submitted for analysis of BTEX, Chlorides, and TPH. Delineation sample results for all samples except one were below the applicable NMAC Table 1 criteria for BTEX, Chlorides and TPH. The one exceedance was for chloride in sample DS-7 (0.5-1.0 ft), which was reported with chloride of 17,900

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
Snapping 12 CTB 2 | Eddy County, New Mexico  
March 31, 2026 | Terracon Project No. KH247057



milligrams per kilogram (mg/kg). Analytical results for these samples are presented in Table 1. The laboratory analytical reports and chains of custody are provided in Appendix E.

On March 10, 2026, in response to the NMOCD deferral report denial, Terracon returned to the site and collected lateral delineation sample DS-13 (0.5-1.0 ft) southwest of sample location DS-3 and vertical delineation sample DS-14 (2.5-3.0 ft) and DS-14 (5.5-6.0 ft). Boring refusal was encountered on DS-14 at 6.0 feet bgs. These soil samples were submitted for analysis of BTEX, Chlorides, and TPH. Delineation sample results for BTEX, Chloride and TPH in these samples were below applicable NMAC Table 1 criteria. These results are also summarized in Table 1, and the laboratory analytical reports and chains of custody are provided in Appendix E.

#### **Incident No 4. nAPP2512029165**

The affected area was identified through visual observation and confirmed with soil sampling. The affected area was estimated to be approximately 1,200 square feet. Twenty-two delineation samples from locations DS-1 through DS-8, ranging in depths from 0.5-1.0 feet bgs to 13.5-14.0 feet bgs, were collected using a hand auger and a power auger. These soil samples were submitted for analysis of BTEX, Chlorides, and TPH. Delineation sample results for BTEX, TPH and chloride were below applicable NMAC Table 1 criteria in all but two samples. The two exceedances were results for chloride reported from boring DS-2, in samples DS-2 (0.5-1.0 ft) and DS-3 (0.5-1.0 ft), which exceeded the NMAC Table 1 criteria for chloride at 11,800 mg/kg and 14,500 mg/kg, respectively.

On July 23, 2025, boring DS-1 was extended using a power auger to vertically delineate the release. Delineation sample DS-1.2 (13.5-14.0 ft) was collected. This sample was submitted for analysis of BTEX, Chlorides, and TPH. Results for BTEX and TPH were reported below sample detection limits, and chloride was reported with a concentration of 46.8 mg/kg, all below applicable NMAC Table 1 criteria.

On March 10, 2026, in response to the NMOCD deferral report denial, Terracon returned to the site and collected vertical delineation sample DS-2 (9.0-9.5 ft) directly adjacent to the previous DS-2 location. This soil sample was submitted for analysis of BTEX, Chlorides, and TPH. BTEX and TPH were reported to be below sample detection limits. Chloride was reported at a concentration of 127 mg/kg, well below the NMAC Table 1 criteria of <600 mg/kg demonstrating that vertical delineation was attained. Based on the sample results, the vertical and horizontal extent of impact in the inferred release areas has been delineated

A Delineation Sample Map depicting the delineation sample locations and analytical results is included in Exhibit 7. Photographs of the project site are included in Appendix A. Delineation sample results are provided in Table 1. The laboratory analytical reports along with the chain of custody are provided in Appendix E.

## **5.0 Remediation and Confirmation Sampling Summary**

Remediation efforts encompassing the areas of all four incidents were conducted at the site from September 19, 2025, through October 8, 2025. These activities included the excavation and removal of soil that exceeded NMAC Table 1 Criteria, where accessible.

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
Snapping 12 CTB 2 | Eddy County, New Mexico  
March 31, 2026 | Terracon Project No. KH247057



### **Incident No. 3 (nAPP2508758656)**

A total area of approximately 500 square feet was excavated to a depth of approximately 2 feet bgs. A total of approximately 40 cubic yards of excavated soil was stockpiled on site, then was hauled off-site and disposed of at Delaware Basin Landfill disposal facility in Lea County, New Mexico.

On September 24, 2025, Terracon collected five-point composite soil samples to confirm successful removal of impacted material. A total of 2 confirmation floor samples, CFS-1 (2.0-2.5 ft) and CFS-2 (2.0-2.5 ft) and one confirmation wall sample CWS-1 (0.0-2.0) were collected. The soil samples were submitted for analysis of BTEX, Chloride and TPH. The laboratory results for these samples were reported below the laboratory detection limits for BTEX and TPH and below the NMAC Table 1 criteria for Chloride. Advance notice of the closure sampling was provided to NMOCD greater than 48 hours prior to the sampling event. Analytical results are presented in Table 2, and laboratory reports and chains of custody are provided in Appendix E.

A composite backfill sample BFS-1 was collected and analyzed for BTEX, Chloride and TPH. The BTEX and TPH results for backfill sample BFS-1 were below the laboratory detection limit and Chloride was below the NMAC Table 1 Criteria. Analytical results are presented in Table 3, and the laboratory report and chain of custody are presented in Appendix E. A total of 40 cubic yards of backfill material was backhauled from Delaware Basin, and the excavation was backfilled.

The material remaining in place does not exceed NMOCD closure criteria.

### **Incident No. 4 (nAPP2512029165)**

As shown in Exhibit 6, and Photos 3 and 4 in Appendix A, Incident No. 4 occurred in an area with piping, valves and related process equipment. Soil removal occurred to the extent possible, with a total area of approximately 24 square feet being excavated from the area adjacent to sample location DS-3, to a depth of approximately 2 feet bgs. A total of approximately 2 cubic yards of excavated soil was stockpiled on site, then was hauled off-site and disposed of at Delaware Basin Landfill disposal facility in Lea County, New Mexico.

The remaining exceedance area adjacent to DS-2 is not accessible due to the above ground pipe chase. In compliance with NMOCD 48-hour sample notification requirement, Devon submitted 48-hour sample notification. In compliance with NMOCD closure requirements, five-point composite closure soil samples were collected from the excavation. On September 24, 2025, one confirmation floor sample, CFS-1 (2.0-2.5 ft) and one confirmation wall sample CWS-1 (0.0-2.0) were collected. These soil samples were submitted for analysis of BTEX, Chloride and TPH. The results for these floor samples and wall sample were below the laboratory detection limits for BTEX and TPH and below the NMAC Table 1 criteria for Chloride.

The material remaining in-place adjacent to DS-3 location does not exceed NMAC Table 1 criteria. However, the material remaining in-place adjacent to DS-2 location does exceed closure criteria but is not accessible due to the presence of active operational equipment.

A composite backfill sample BFS-1 was collected and analyzed for BTEX, Chloride and TPH. The BTEX and TPH results for backfill sample BFS-1 were below the laboratory detection limit and Chloride was below the NMAC Table 1 Criteria. A total of 2 cubic yards of backfill material was backhauled from Delaware Basin, and the excavation was backfilled.

Deferral Request Report | NMOCD Incident No. nAPP2512029165  
Snapping 12 CTB 2 | Eddy County, New Mexico  
March 31, 2026 | Terracon Project No. KH247057



A Confirmation Sample Map depicting the confirmation sample locations and analytical results is included in Exhibit 8. Photographs of the project site are included in Appendix A. Confirmation sample results are provided in Table 2 and backfill sample results are provided in Table 3. The laboratory analytical reports for these samples along with the chains of custody are provided in Appendix E. Terracon's Standard of Care, Limitations and Reliance is included as Appendix F.

The impacted zone for the four incidents is estimated at 15,500 square feet to an average depth of 4.0 feet bgs, an estimated 2,300 cubic yards of affected soil. An Affected Area Map depicting the estimated impacted area is included in Exhibit 9.

## 6.0 Conclusions

Terracon on behalf of Devon Energy Production Company, LP, has completed a comprehensive assessment and remediation of the impacted area at the Snapping 12 CTB 2 location associated with NMOCD Incident Nos. nAPP2432333537, nAPP2508321694 and nAPP2508758656. The delineation and confirmation sampling confirm that the areas that had been impacted at levels above the NMAC Table 1 criteria have been remediated to the extent currently feasible, and remaining impacts confined beneath and around production equipment and on pad infrastructure are below the NMAC Table 1 criteria.

For Incident No. nAPP2512029165, the impacted area has been delineated and remediated to the extent currently feasible. The presence of active oil & gas equipment in this area does not allow further excavation.

Due to restricted access beneath the above-ground infrastructure including pipe chases, vessels, associated production equipment, further active remediation poses a risk to structural integrity and is not feasible at this time. Accordingly, Devon Energy respectfully requests a deferral of NMOCD incident nAPP2432333537, nAPP2508321694, nAPP2508758656 and nAPP2512029165.

Devon Energy remains committed to full reclamation in accordance with applicable NMAC regulations. Once the production equipment is decommissioned and safe access is available, Devon will complete site reclamation as required.

## **EXHIBITS**

Exhibit 1 – Topographic Map

Exhibit 2 – Site Location Map

Exhibit 3 – NMOSE Pod Location Map

Exhibit 4 – Regulatory Criteria Map

Exhibit 5 – Cave Karts Public UCP Map

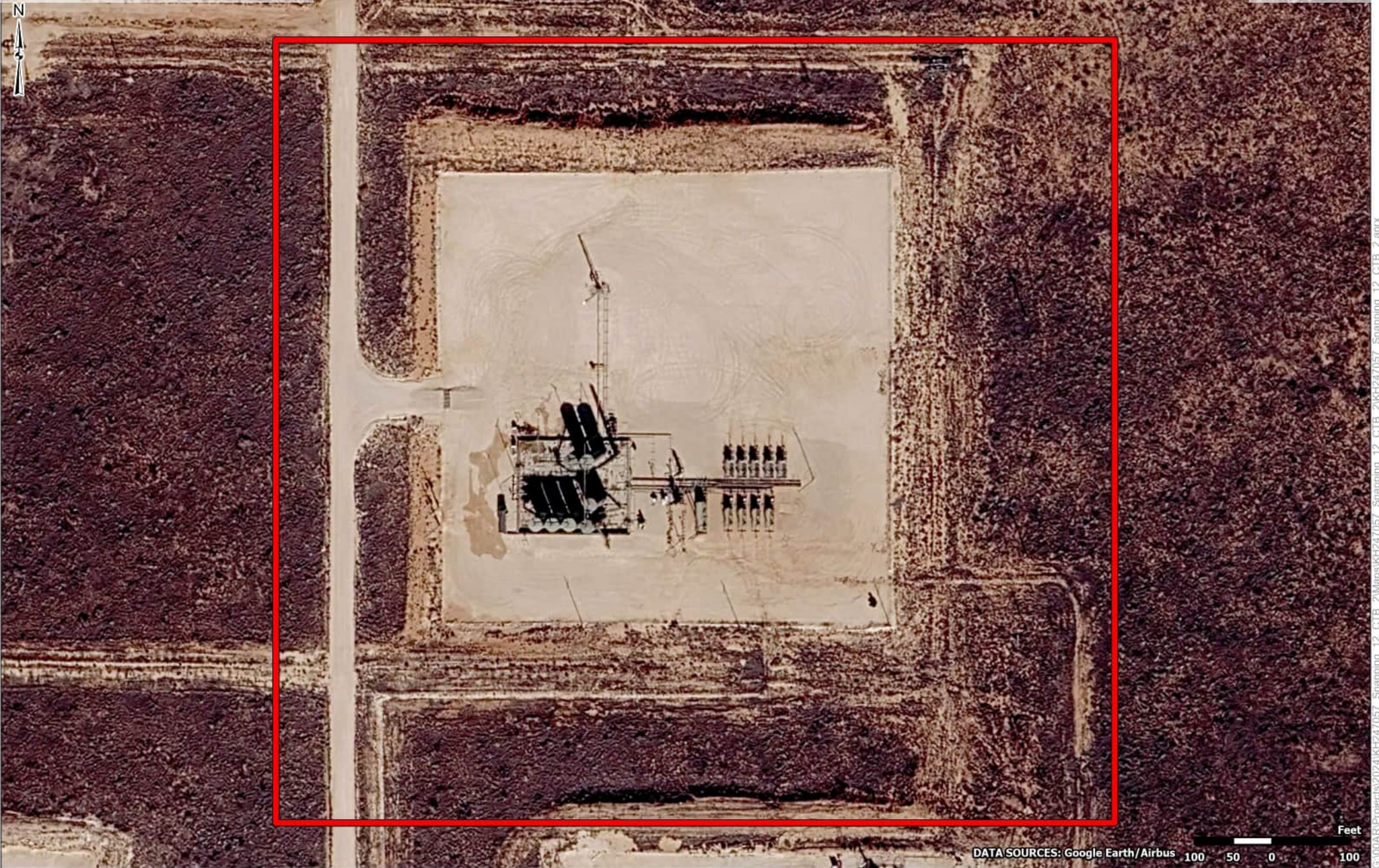
Exhibit 6 – Release Area Map

Exhibit 7 – Delineation Sample Location Map

Exhibit 8 – Confirmation Sample Location Map

Exhibit 9 – Affected Area Map






DATA SOURCES: Google Earth/ Airbus 100 50 0 100 Feet



 Site Boundary

Project No.:  
KH247057  
Date:  
Mar 30 2026  
Drawn By:  
JWL  
Reviewed By:  
CFS



4526 W Pierce St  
Carlsbad, NM  
PH. 806-300-0140      terracon.com

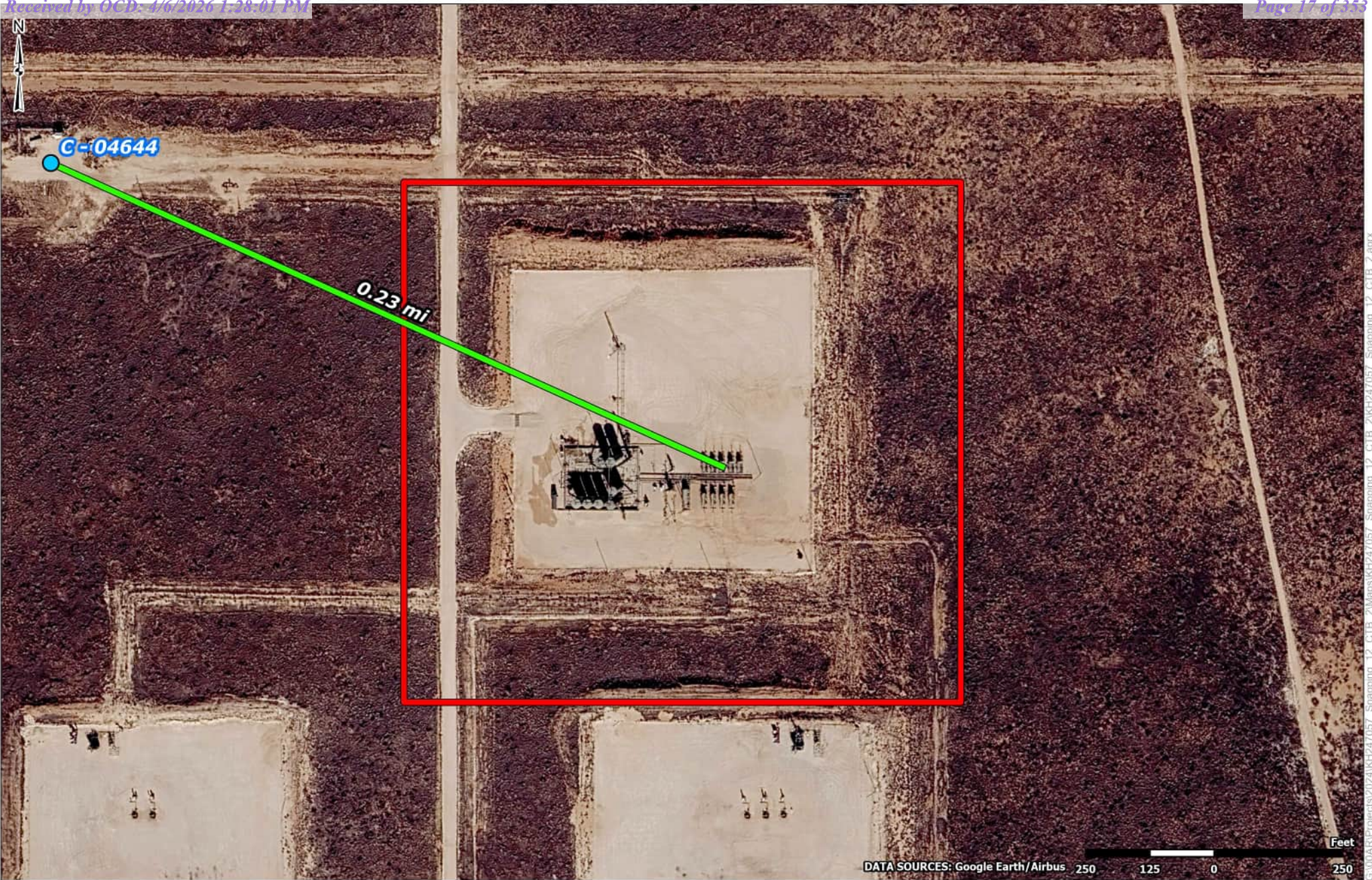
**Site Location Map**

Snapping 12 CTB 2  
32.060005,-103.734905  
Carlsbad, New Mexico

**Exhibit**

**2**

C:\000ARR\Projects\2024\KH247057 - Snapping 12 CTB - 2\Map\KH247057 - Snapping 12 CTB - 2\Map\KH247057 - Snapping 12 CTB - 2.aprx




- Site Boundary
- NMOSE POD Location

Project No.:  
KH247057

Date:  
Mar 30 2026

Drawn By:  
JWL

Reviewed By:  
CFS



5847 50th St  
Lubbock, TX

PH. 806-300-0140      terracon.com

**NMOSE POD Location Map**

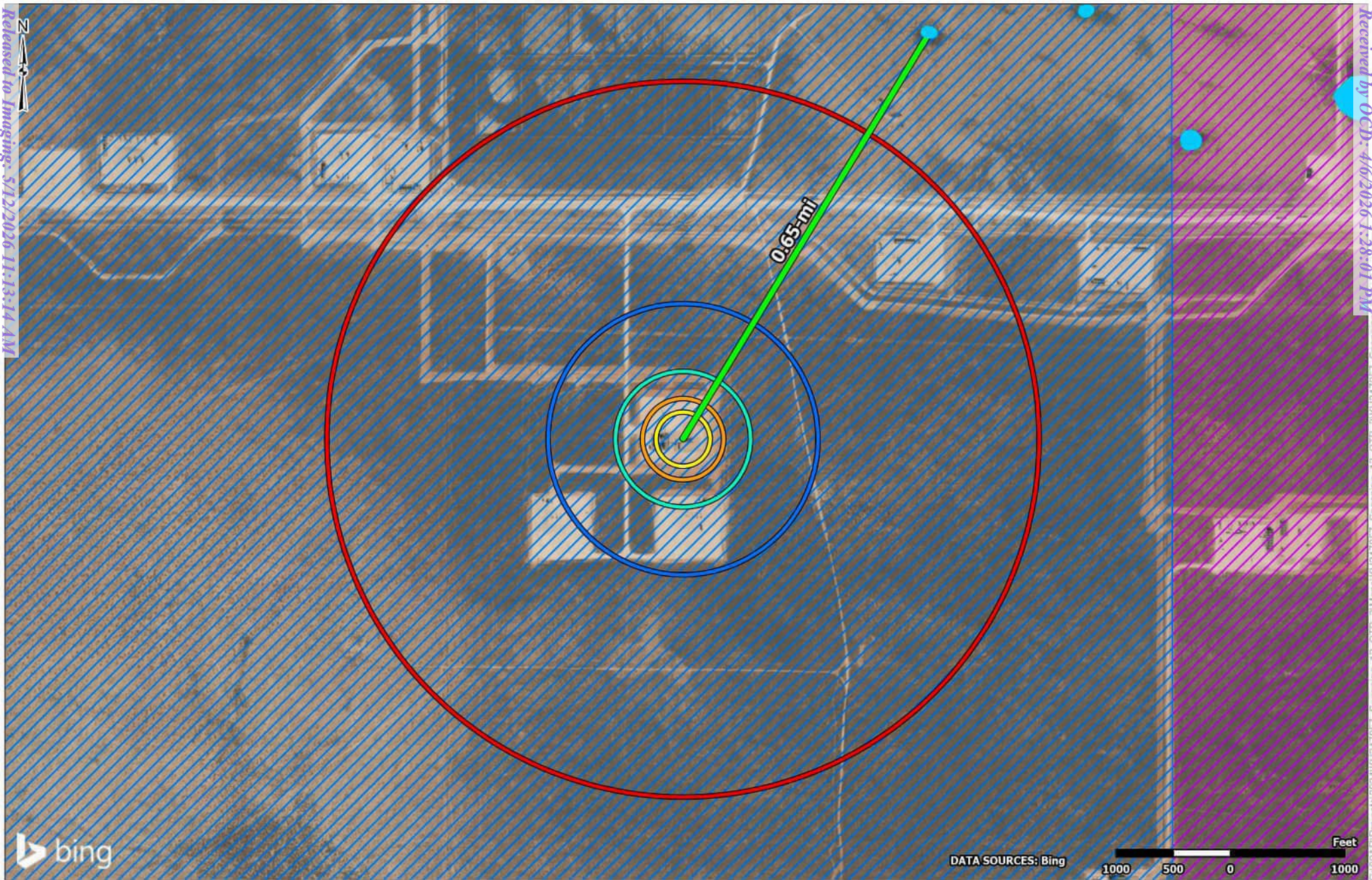
Snapping 12 CTB 2  
32.060005,-103.734905  
Carlsbad, New Mexico

**Exhibit**

**3**

DATA SOURCES: Google Earth/Airbus 250 125 0 250 Feet

G:\000ARR\Projects\2024\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2.aprx



- Flood Zone "D"
- Flood Zone "X"
- Freshwater Emergent Wetland
- 200-ft Radius
- 300-ft Radius
- 500-ft Radius
- 1,000-ft Radius
- 0.5-mi Radius

Project No.: KH247057  
 Date: Oct 27 2025  
 Drawn By: JWJ  
 Reviewed By: CFS

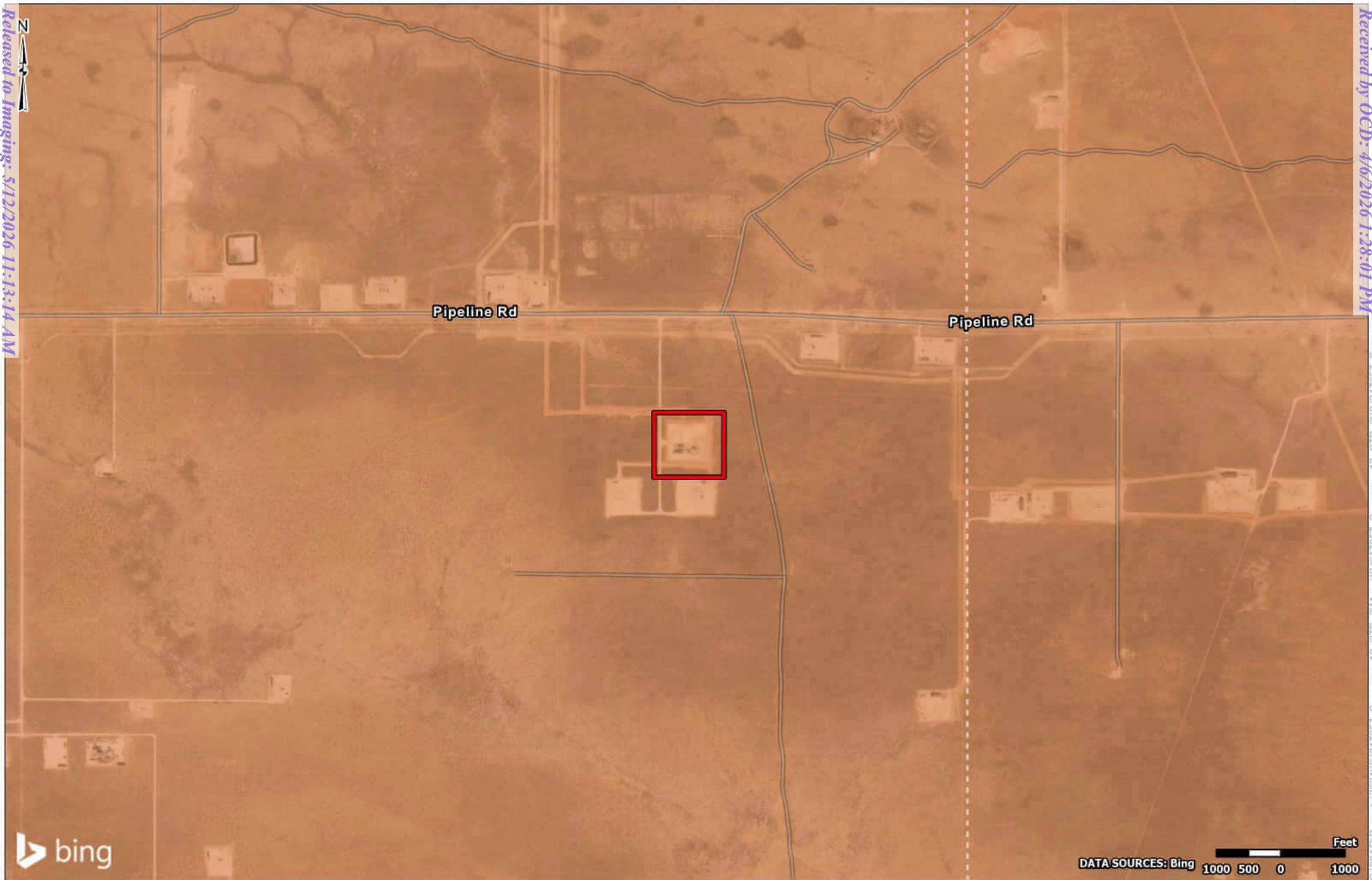
5847 50th St  
 Lubbock, TX  
 PH. 806-300-0140      terracon.com

**Regulatory Criteria Map**

Snapping 12 CTB 2  
 32.060005,-103.734905  
 Carlsbad, New Mexico

**Exhibit**

4




-  Site Boundary
- Karst Potential**
-  Low
-  Medium
-  High

Project No.:  
KH247057

Date:  
Jun 05 2025

Drawn By:  
JWL

Reviewed By:  
JRG



5847 50th St  
Lubbock, TX

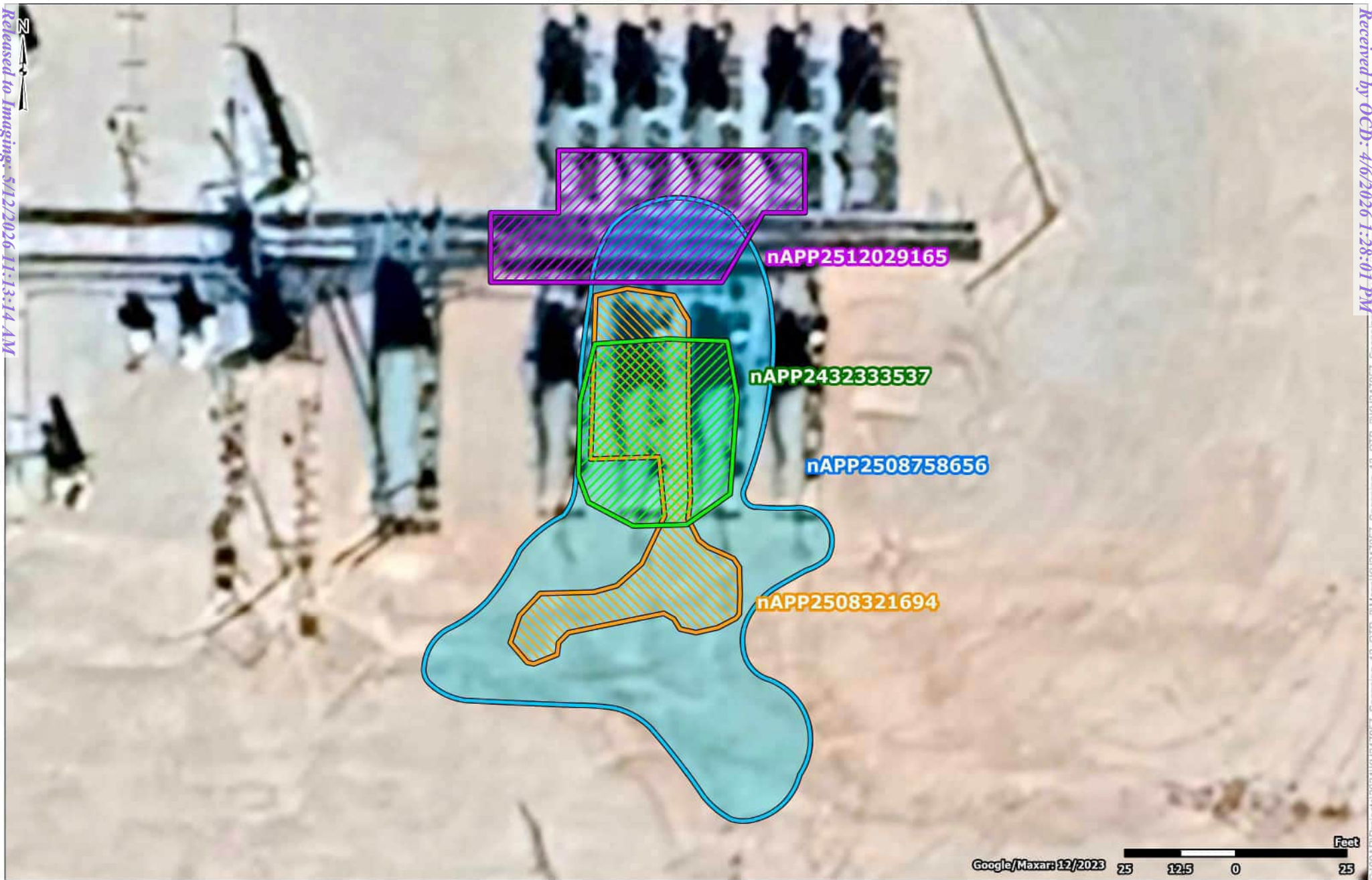
PH. 806-300-0140      terracon.com

**Cave Karst Public UCP Map**

Snapping 12 CTB 2  
32.060005, -103.734905  
Carlsbad, New Mexico

**Exhibit**

**5**



- 1st Release: nAPP2432333537 (955 Sq Ft)
- 2nd Release: nAPP2508321694 (1,145 Sq Ft)
- 3rd Release: nAPP2508758656 (4,580 Sq Ft)
- 4th Release nAPP2512029165 (1,200 Sq Ft)

Project No.: KH247057  
 Date: Oct 22 2025  
 Drawn By: JWL  
 Reviewed By: CFS



5847 50th St  
Lubbock, TX

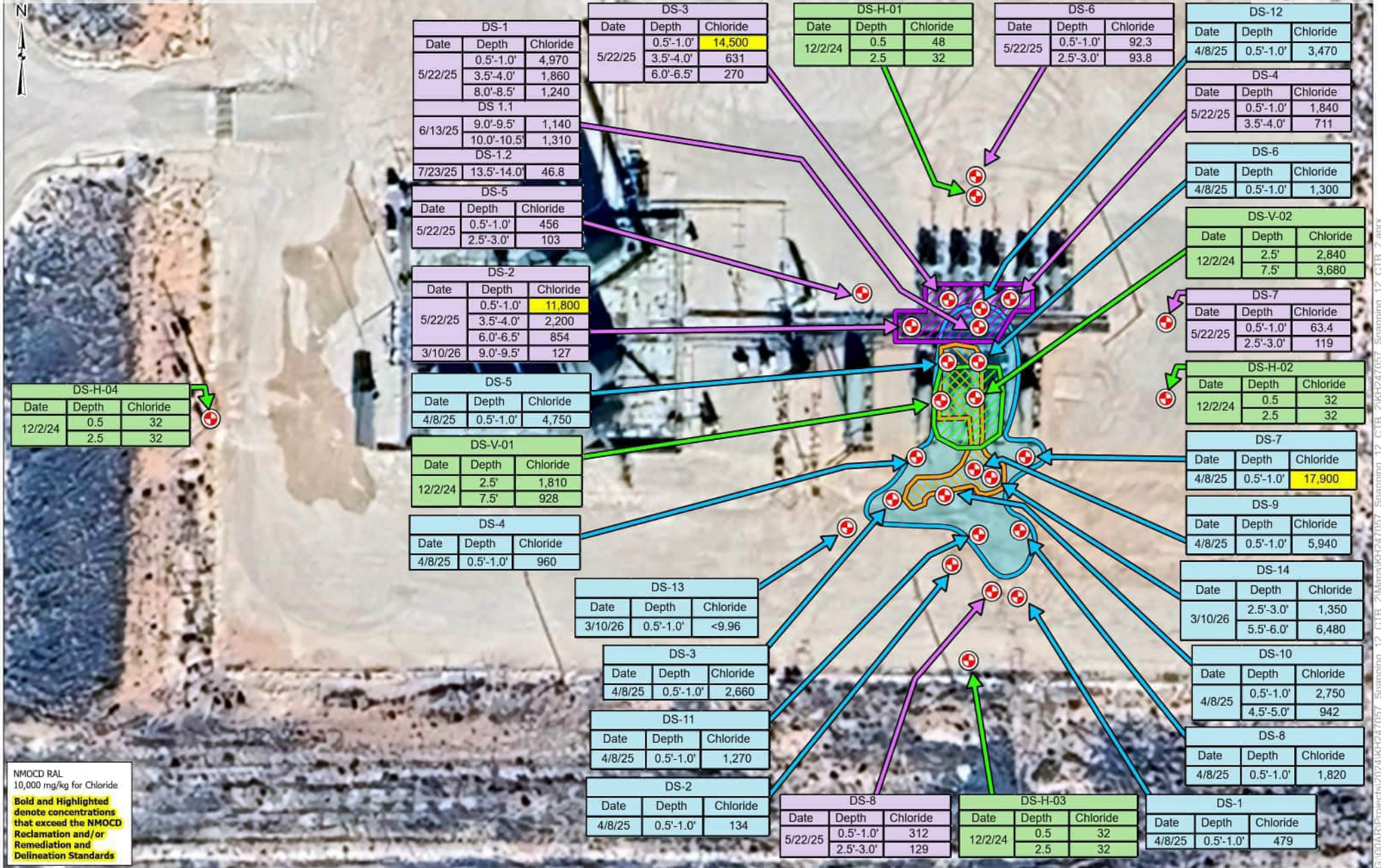
PH. 806-300-0140      terracon.com

**Release Area Map**

Snapping 12 CTB 2  
32.060005,-103.734905  
Carlsbad, New Mexico

**Exhibit**

6



- ⊕ Delineation Sample
  - 1st Release: nAPP2432333537 (955 sq. ft.)
  - 2nd Release: nAPP2508321694 (1,145 sq. ft.)
  - 3rd Release: nAPP2508758656 (4,580 sq. ft.)
  - 4th Release nAPP2512029165 (1,200 sq. ft.)
- Released to Imaging: 5/12/2026 11:13:14 AM

Project No.: KH247057  
 Date: Mar 19 2026  
 Drawn By: JWJ  
 Reviewed By: CFS

5847 50th St  
Lubbock, TX

PH. 806-300-0140 terracon.com

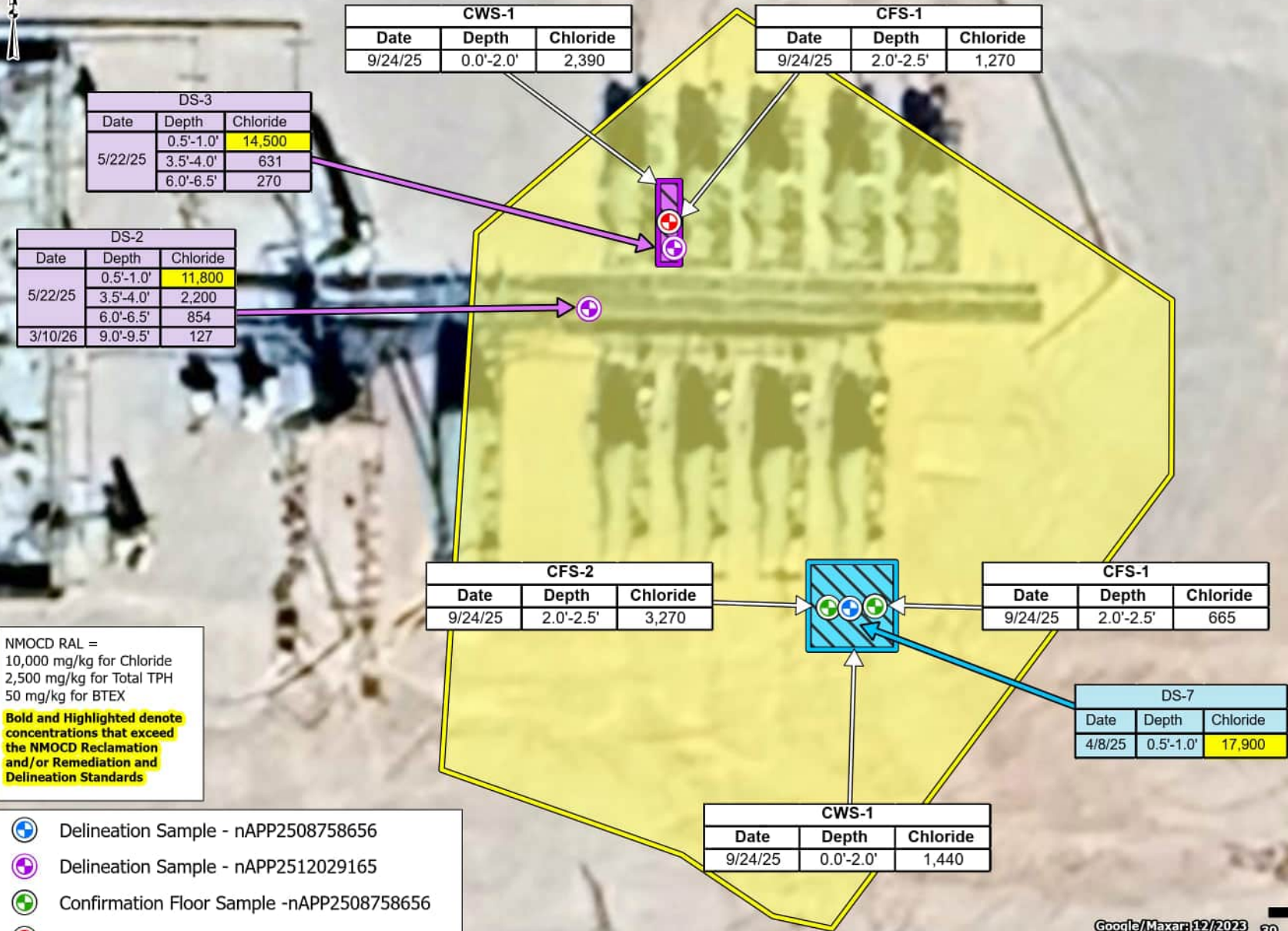
**Delineation Sample Map (Chloride)**

Snapping 12 CTB 2  
 1st Release: nAPP2432333537  
 2nd Release: nAPP2508321694  
 3rd Release: nAPP2508758656  
 4th Release nAPP2512029165  
 32.060005,-103.734905  
 Carlsbad, New Mexico

**Exhibit**

7

G:\004R\Projects\2024\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2.aprx



NMOCD RAL =  
 10,000 mg/kg for Chloride  
 2,500 mg/kg for Total TPH  
 50 mg/kg for BTEX

**Bold and Highlighted denote concentrations that exceed the NMOCD Reclamation and/or Remediation and Delineation Standards**

- Delineation Sample - nAPP2508758656
- Delineation Sample - nAPP2512029165
- Confirmation Floor Sample - nAPP2508758656
- Confirmation Floor Sample - nAPP2512029165
- Confirmation Wall Sample - nAPP2512029165
- Confirmation Wall Sample - nAPP2508758656
- Excavation Area (500 sq. ft.) - nAPP2508758656
- Excavation Area (24 sq. ft.) - nAPP2512029165
- Affected Area (15,500 sq. ft.)



Project No.: KH247057  
 Date: Mar 31 2026  
 Drawn By: JWL  
 Reviewed By: CFS

5847 50th St  
 Lubbock, TX  
 PH. 806-300-0140 terracon.com

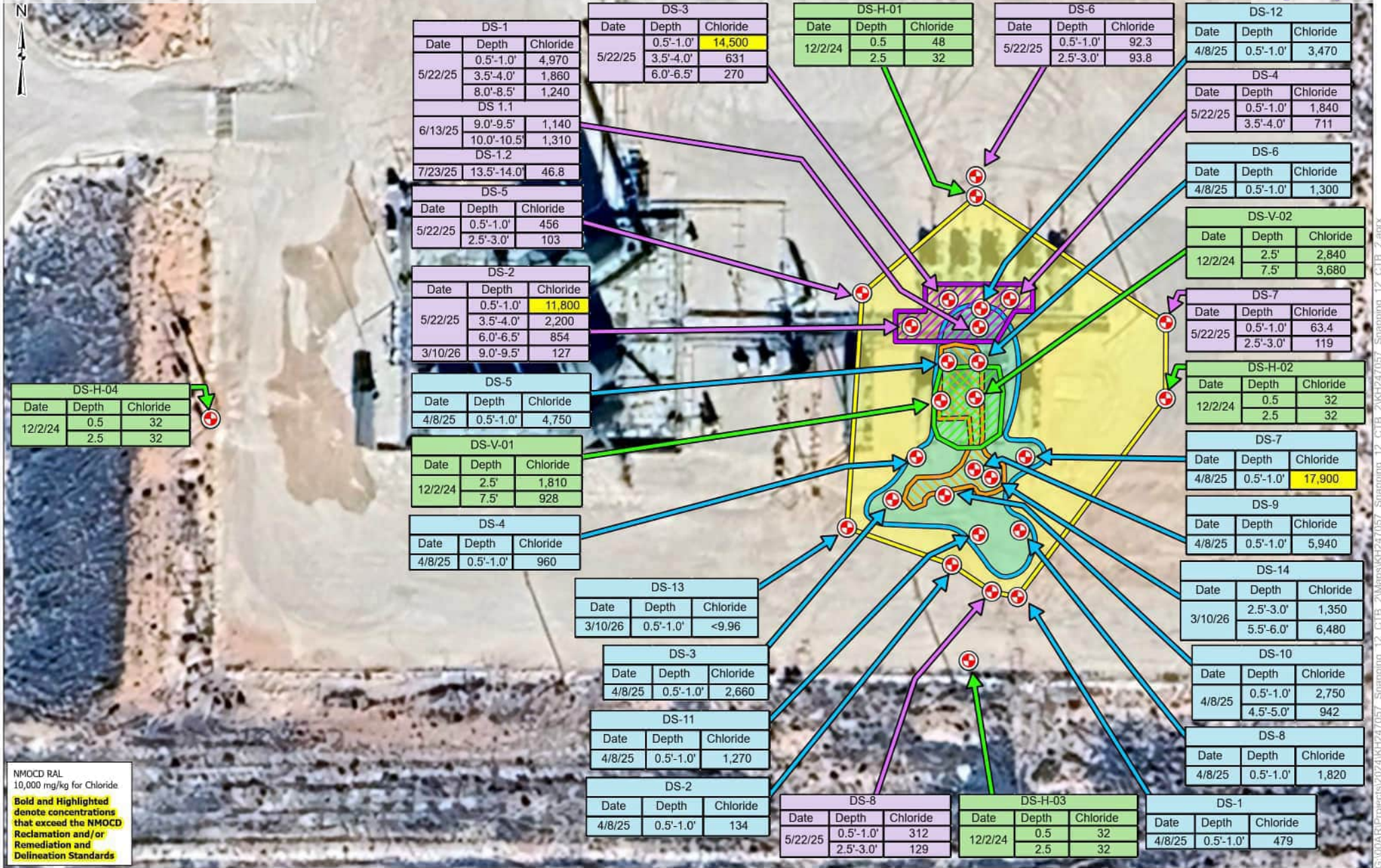
**Confirmation Sample Map (Chloride)**

Snapping 12 CTB 2  
 NMOCD Incident #nAPP2508758656  
 NMOCD Incident #nAPP2512029165  
 32.060005,-103.734905  
 Carlsbad, New Mexico

**Exhibit**

8

G:\000ARR\Projects\2024\KH247057 - Snapping 12 CTB 2\Map\KH247057 - Snapping 12 CTB 2\Map\KH247057 - Snapping 12 CTB 2.aprx



NMOC RAL  
10,000 mg/kg for Chloride

**Bold and Highlighted**  
denote concentrations  
that exceed the NMOC  
Reclamation and/or  
Remediation and  
Delineation Standards

- ⊕ Delineation Sample
- 1st Release: nAPP243233537 (955 sq. ft.)
- 2nd Release: nAPP2508321694 (1,145 sq. ft.)
- 3rd Release: nAPP2508758656 (4,580 sq. ft.)
- 4th Release nAPP2512029165 (1,200 sq. ft.)
- Affected Area (15,500 sq. ft.)

Project No.: KH247057  
Date: Mar 23 2026  
Drawn By: JWJ  
Reviewed By: CFS

**Terracon**  
5847 50th St  
Lubbock, TX  
PH. 806-300-0140 terracon.com

**Affected Area Map**  
Snapping 12 CTB 2  
1st Release: nAPP243233537  
2nd Release: nAPP2508321694  
3rd Release: nAPP2508758656  
4th Release nAPP2512029165  
32.060005,-103.734905  
Carlsbad, New Mexico

**Exhibit**  
  
**9**

G:\00ARR\Projects\2024\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2\Map\KH247057\_Snapping\_12\_CTB\_2.aprx


## **TABLES**

**Table 1 – Delineation Sample Results**

**Table 2 – Confirmation Sample Results**

**Table 3 – Backfill Sample Results**

**Table 1**  
**Soil Analytical Results Summary - Delineation Samples**  
**Terracon Project Code: KH247057-Snapping 12 CTB 2**  
**NMOCD Reference No. nAPP2432333537, nAPP2508756856 & nAPP2512029165**

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Incident # nAPP2432333537</b>											
DS-H-01	12/2/2024	0.5	Grab	In-Situ	48	ND	ND	ND	ND	ND	ND
	12/2/2024	2.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
DS-H-02	12/2/2024	0.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	12/2/2024	2.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
DS-H-03	12/2/2024	0.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	12/2/2024	2.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
DS-H-04	12/2/2024	0.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
	12/2/2024	2.5	Grab	In-Situ	32	ND	ND	ND	ND	ND	ND
DS-V-01	12/2/2024	2.5	Grab	In-Situ	1,810	ND	ND	ND	ND	ND	ND
	12/2/2024	7.5	Grab	In-Situ	928	ND	ND	ND	ND	ND	ND
DS-V-02	12/2/2024	2.5	Grab	In-Situ	2840	ND	ND	ND	ND	ND	ND
	12/2/2024	7.5	Grab	In-Situ	3680	ND	ND	ND	ND	ND	ND
<b>Incident # nAPP2508756856</b>											
DS-1	4/8/2025	0.5-1.0	Grab	In-Situ	479	ND	0.00634	ND	ND	ND	ND
DS-2	4/8/2025	0.5-1.0	Grab	In-Situ	134	ND	ND	ND	ND	ND	ND
DS-3	4/8/2025	0.5-1.0	Grab	In-Situ	2,660	ND	ND	ND	ND	ND	ND
DS-4	4/8/2025	0.5-1.0	Grab	In-Situ	960	ND	ND	ND	ND	ND	ND
DS-5	4/8/2025	0.5-1.0	Grab	In-Situ	4,750	ND	ND	ND	ND	ND	ND
DS-6	4/8/2025	0.5-1.0	Grab	In-Situ	1,300	ND	ND	ND	ND	ND	ND
DS-7	4/8/2025	0.5-1.0	Grab	In-Situ	<b>17,900</b>	ND	ND	ND	ND	ND	ND
DS-8	4/8/2025	0.5-1.0	Grab	In-Situ	1,820	ND	ND	ND	ND	ND	ND
<b>NMOCD Reclamation Standards<sup>3</sup> (Surface to 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA
<b>NMOCD Remediation Standards<sup>4</sup> (Greater than Depths of 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N,12/01/23 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed N/A = Not Applicable									Data Entry:	cfs	
									Reviewed By:	jrg	
<b>Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.</b> In-situ = Sample is representative of material which remains in-place at the site.											

**Table 1**  
**Soil Analytical Results Summary - Delineation Samples**  
**Terracon Project Code: KH247057-Snapping 12 CTB 2**  
**NMOCD Reference No. nAPP2432333537, nAPP2508756856 & nAPP2512029165**

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Incident # nAPP2508756856</b>											
DS-9	4/8/2025	1.5-2.0	Grab	In-Situ	5,940	ND	ND	ND	ND	ND	ND
DS-10	4/8/2025	0.5-1.0	Grab	In-Situ	2,750	ND	ND	ND	ND	ND	ND
	4/8/2025	4.5-5.0	Grab	In-Situ	942	ND	ND	ND	ND	ND	ND
DS-11	4/8/2025	0.5-1.0	Grab	In-Situ	1,270	ND	ND	ND	ND	ND	ND
DS-12	4/8/2025	0.5-1.0	Grab	In-Situ	3,470	ND	ND	ND	ND	ND	ND
DS-13	3/10/2026	0.5-1.0	Grab	In-Situ	<9.96	ND	ND	ND	ND	ND	ND
DS-14	3/10/2026	2.5-3.0	Grab	In-Situ	1,350	ND	ND	ND	ND	ND	ND
	3/10/2026	5.5-6.0	Grab	In-Situ	6,480	ND	ND	ND	ND	ND	ND
<b>Incident # nAPP2512029165</b>											
DS-1	5/22/2025	0.5-1.0	Grab	In-Situ	4,790	ND	ND	ND	ND	ND	ND
	5/22/2025	3.5-4.0	Grab	In-Situ	1,960	ND	ND	ND	ND	ND	ND
	5/22/2025	8.0-8.5	Grab	In-Situ	1,240	ND	ND	ND	ND	ND	ND
DS-1.1	6/13/2025	9.0-9.5	Grab	In-Situ	1,140	ND	ND	ND	ND	ND	ND
	6/13/2025	10.0-10.5	Grab	In-Situ	1,310	ND	ND	ND	ND	ND	ND
DS-1.2	7/23/2025	13.5-14.0	Grab	In-Situ	46.8	ND	ND	ND	ND	ND	ND
DS-2	5/22/2025	0.5-1.0	Grab	In-Situ	<b>11,800</b>	ND	ND	ND	ND	ND	ND
	5/22/2025	3.5-4.0	Grab	In-Situ	2,200	ND	ND	ND	ND	ND	ND
	5/22/2025	6.0-6.5	Grab	In-Situ	854	ND	ND	ND	ND	ND	ND
	3/10/2026	9.0-9.5	Grab	In-Situ	127	ND	ND	ND	ND	ND	ND
DS-3	5/22/2025	0.5-1.0	Grab	In-Situ	<b>14,500</b>	ND	ND	ND	ND	ND	ND
	5/22/2025	3.5-4.0	Grab	In-Situ	631	ND	ND	ND	ND	ND	ND
	5/22/2025	6.0-6.5	Grab	In-Situ	270	ND	ND	ND	ND	ND	ND
DS-4	5/22/2025	0.5-1.0	Grab	In-Situ	1,840	ND	ND	ND	ND	ND	ND
	5/22/2025	3.5-4.0	Grab	In-Situ	711	ND	ND	ND	ND	ND	ND
<b>NMOCD Reclamation Standards<sup>3</sup> (Surface to 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA
<b>NMOCD Remediation Standards<sup>4</sup> (Greater than Depths of 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA

1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes  
 2. TPH = Total petroleum hydrocarbons  
 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs  
 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018  
 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL).  
 NA = Not Analyzed  
**Bold denotes concentrations above applicable laboratory SDLs.**  
**Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**  
 In-situ = Sample is representative of material which remains in-place at the site.

Data Entry:	cfs
Reviewed By:	jrg




**Table 1**  
**Soil Analytical Results Summary - Delineation Samples**  
**Terracon Project Code: KH247057-Snapping 12 CTB 2**  
**NMOCD Reference No. nAPP2432333537, nAPP2508756856 & nAPP2512029165**

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Incident # nAPP2512029165</b>											
DS-5	5/22/2025	0.5-1.0	Grab	In-Situ	456	ND	ND	ND	ND	ND	ND
	5/22/2025	2.5-3.0	Grab	In-Situ	103	ND	ND	ND	ND	ND	ND
DS-6	5/22/2025	0.5-1.0	Grab	In-Situ	92.3	ND	ND	ND	ND	ND	ND
	5/22/2025	2.5-3.0	Grab	In-Situ	93.8	ND	ND	ND	ND	ND	ND
DS-7	5/22/2025	0.5-1.0	Grab	In-Situ	63.4	ND	ND	ND	ND	ND	ND
	5/22/2025	2.5-3.0	Grab	In-Situ	119	ND	ND	ND	ND	ND	ND
DS-8	5/22/2025	0.5-1.0	Grab	In-Situ	312	ND	ND	ND	ND	ND	ND
	5/22/2025	2.5-3.0	Grab	In-Situ	129	ND	ND	ND	ND	ND	ND
<b>NMOCD Reclamation Standards<sup>3</sup> (Surface to 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA
<b>NMOCD Remediation Standards<sup>4</sup> (Greater than Depths of 4 ft bgs)</b>					10,000	10	10	2,500	1,000		NA


1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes  
 2. TPH = Total petroleum hydrocarbons  
 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs  
 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N, 8/14/2018  
 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL).  
 NA = Not Analyzed  
**Bold denotes concentrations above applicable laboratory SDLs.**  
**Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.**  
 In-situ = Sample is representative of material which remains in-place at the site.

Data Entry:	cfs
Reviewed By:	jrg




**Terracon**  
Explore with us

**Table 2**  
**Soil Analytical Results Summary - Confirmation Samples**  
**Terracon Project No: KH247057-Snapping 12 CTB 2**  
**NMOCD Incident No. nAPP2508756856 & nAPP2512029165**

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Incident No. nAPP2508756856</b>											
<b>Confirmation Floor Samples</b>											
CFS-1	9/24/2025	2.0-2.5	Composite	In-Situ	665	ND	ND	ND	ND	ND	ND
CFS-2	9/24/2025	2.0-2.5	Composite	In-Situ	3,270	ND	ND	ND	ND	ND	ND
<b>Confirmation Wall Samples</b>											
CWS-1	9/24/2025	0.0-2.0	Composite	In-Situ	1,440	ND	ND	ND	ND	ND	ND
<b>Incident No. nAPP2512029165</b>											
<b>Confirmation Floor Samples</b>											
CFS-1	9/24/25	2.0-2.5	Composite	In-Situ	1,270	ND	ND	ND	ND	ND	ND
<b>Confirmation Wall Samples</b>											
CWS-1	9/24/25	0.0-2.0	Composite	In-Situ	2,390	ND	ND	ND	ND	ND	ND
<b>NMOCD Remediation Standards<sup>4</sup> (Surface to 4 ft bgs)</b>					10,000	10	50	2,500	1,000	NA	
<b>NMOCD Remediation Standards<sup>4</sup> (Greater than Depths of 4 ft bgs)</b>					10,000	10	50	2,500	1,000	NA	
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N,12/01/23 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed N/A = Not Applicable									Data Entry:	cfs	
									Reviewed By:	jrg	
											
<b>Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.</b>											
In-situ = Sample is representative of material which remains in-place at the site. Excavated = Sample is representative of materials which was excavated and disposed of at a permitted disposal facility.											

**Table 3**  
**Soil Analytical Results Summary - Backfill Results**  
**Terracon Project Code: KH247057-Snapping 12 CTB 2**  
**NMOCD Reference No. nAPP2508756856**

Sample ID	Sample Date	Sample Depth (ft bgs)	Sample Type	Sample Status	Chloride (mg/Kg)	Benzene (mg/Kg)	Total BTEX <sup>1</sup> (mg/Kg)	Total TPH <sup>2</sup> (mg/Kg)	Gasoline Range Organics (C6-C10) (mg/Kg)	Diesel Range Organics (Over C10-C28) (mg/Kg)	Oil Range Organics (Over C28-C36) (mg/Kg)
					EPA Method 300	EPA Method 8021B	EPA Method 8021B	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M	EPA Method 8015M
<b>Confirmation Sidewall Samples</b>											
BFS-1	9/24/25	N/A	Composite	In-Situ	584	ND	ND	ND	ND	ND	ND
<b>NMOCD Reclamation Standards<sup>3</sup> (Surface to 4 ft bgs)</b>					10,000	10	50	2,500	1,000		NA
<b>NMOCD Remediation Standards<sup>4</sup> (Greater than Depths of 4 ft bgs)</b>					10,000	10	50	2,500	1,000		NA
1. BTEX = Benzene, toluene, ethylbenzene, and total xylenes 2. TPH = Total petroleum hydrocarbons 3. New Mexico Administration Code (NMAC) Restoration, Reclamation and Re-vegetation (19.15.29.13), NMAC-D (Reclamation of Areas No Longer in Use) for Soils Extending to 4 ft. bgs 4. New Mexico Oil Conservation Division (NMOCD) Remediation and Delineation Standards (19.15.29.12) NMAC-N,12/01/23 ND = Constituent was not detected above the indicated laboratory sample detection limit (SDL). NA = Not Analyzed N/A = Not Applicable									Data Entry:	cfs	
									Reviewed By:	jrg	
<b>Bold and Highlighted values exceed the NMOCD Reclamation and/or Remediation and Delineation Standards.</b> In-situ = Sample is representative of material which remains in-place at the site. Excavated = Sample is representative of materials which was excavated and disposed of at a permitted disposal facility.											

**APPENDICES**  
**APPENDIX A**  
**Photographic Log**



Photo 1

Site Location Information.



Photo 2

Release point.



Photo 3 View of release area between V108 and V107 facing south.



Photo 4 View of release area on west side of V108 facing north.



---

Photo 5 View of the release area between V 108 and V107 facing north.

---



---

Photo 6 View of excavation adjacent DS-7 sample location facing S from N side.

---



Photo 7 View of excavation adjacent DS-7 sample location facing S from N side.



Photo 8 View of excavation area after backfilling facing S from N side.



Photo 1

Site Location Information.



Photo 2

Release point.



Photo 3

View of release area facing west.

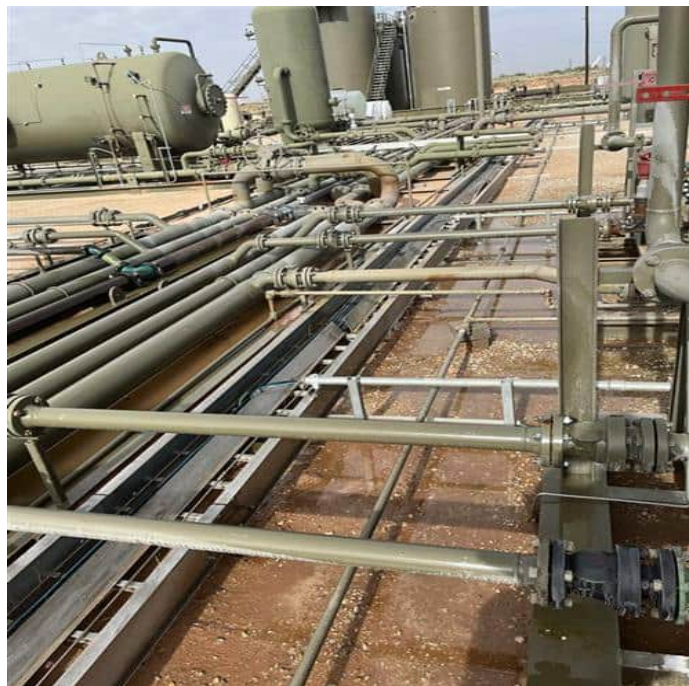


Photo 4

View of the release area facing west.



Photo 5 View of DS-1 sample location adjacent to the centralized release area facing E.

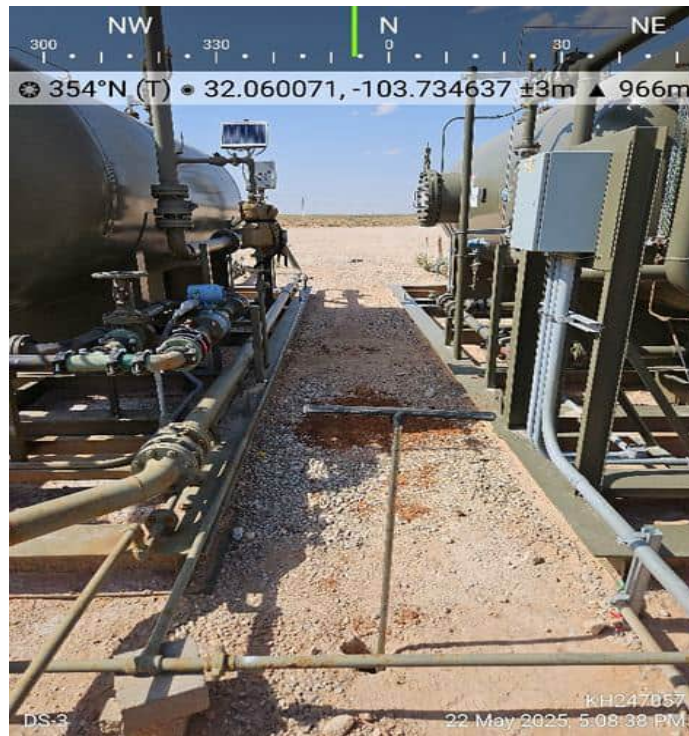


Photo 6 View of DS-3 sample location facing N on N side of pipe chase.



Photo 7

View of excavation looking south.



Photo 8

View of backfilled excavation looking south.

**APPENDICES**  
**APPENDIX B**  
**Desktop Karst Survey Report**

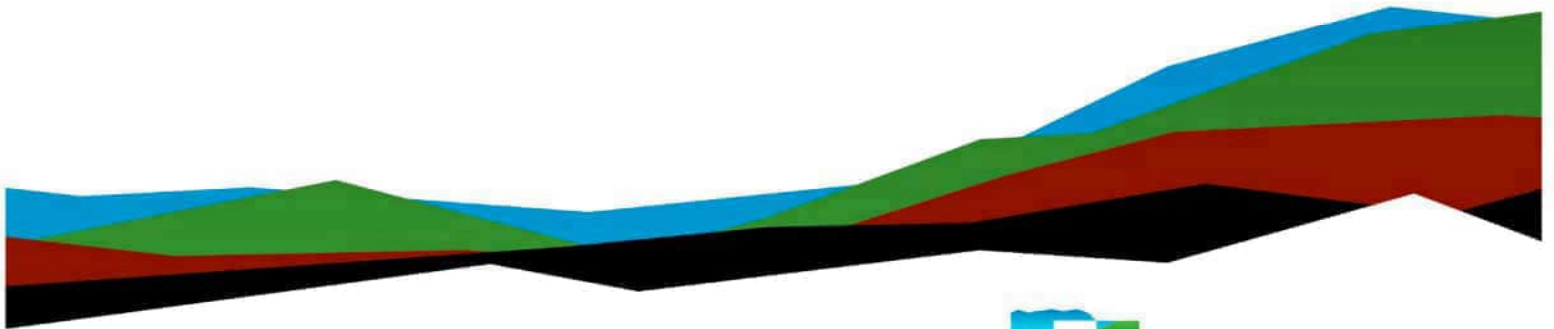
# Snapping 12 CTB 2

## Karst Desktop Report

September 15, 2025 | Terracon Project No. KH247057

### Prepared for:

Devon Energy Corporation  
5315 Buena Vista Drive  
Carlsbad, NM 8820



Nationwide  
Terracon.com

- Facilities
- Environmental
- Geotechnical
- Materials



19955 Highland Vista Drive, #170  
Ashburn, Virginia 20147  
P (703) 726-8030  
[Terracon.com](http://Terracon.com)

September 15, 2025

Devon Energy Corporation  
5315 Buena Vista Drive  
Carlsbad, NM 8820

Attn: Jim Raley  
P: (575) 689-7597  
E: [Jim.Raley@dvn.com](mailto:Jim.Raley@dvn.com)

Re: Karst Desktop Report  
Snapping 12 CTB 2  
Eddy County, New Mexico  
Terracon Project No. KH247057

Dear Mr. Raley:

We have completed the scope of Karst Desktop Report services for the above referenced project in general accordance with Terracon Proposal No. PKH247057. This report presents the findings of the preliminary desktop study at the proposed Snapping 12 CTB 2 in Eddy County, New Mexico.

We appreciate the opportunity to be of service to you on this project. If you have any questions concerning this report or if we may be of further service, please contact us.

Sincerely,

**Terracon**

A handwritten signature in black ink, appearing to read 'JD Valentino'.

Joshua D. Valentino, PhD, PG  
Project Geologist

A handwritten signature in black ink, appearing to read 'Rebecca Smith-Zakowicz'.

Rebecca Smith-Zakowicz, PE, PG  
Senior Principal

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico  
September 15, 2025 | Terracon Project No. KH247057



# Table of Contents

**Introduction ..... 1**

**Geology and Terrain ..... 1**

    Physiography ..... 1

    Topography ..... 1

    Geology ..... 2

    Karst Geology ..... 2

**Desktop Data Review ..... 3**

**Recommendations ..... 4**

**General Comments ..... 5**

## Figures

- Site Map
- Topography Map

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico

September 15, 2025 | Terracon Project No. KH247057



## Introduction

The proposed Snapping 12 CTB 2 site located in Eddy County, New Mexico was assessed for potential karst geohazards underlying the property. The proposed site encompasses approximately 5 acres (Exhibit 1). The objective of the desktop review was to identify suspect karst features which could impact the site. This survey was performed in general compliance with ASTM D8152-23, Standard Practice for Karst Terrain Assessment for Site Development.

## Geology and Terrain

### Physiography

Referencing the USGS physiographic regions of the contiguous United States<sup>1</sup> the Snapping 12 site is located in the Pecos Valley Section of the Great Plains Physiographic Province. The Pecos Valley physiographic section is a broad valley carved by the Pecos River in southeastern New Mexico and western Texas. It's characterized by relatively flat terrain, influenced by the Ogallala Formation and the Mescalero escarpment. The valley also features extensive karst topography, leading to significant cave formations like Carlsbad Caverns. Eastern New Mexico is a physiographic subregion within the U.S. state of New Mexico. The region is sometimes called the "High Plains", or "Eastern Plains (of New Mexico)" and was historically referred to as part of the "Great American Desert". The region is largely coterminous with the portion of the Llano Estacado in New Mexico. Portions of Eastern New Mexico's elevation extend to over 4,000 ft (1,200 m). The region is characterized by flat, largely featureless terrain with the exception of the Pecos River valley and the abrupt breaks along the Mescalero Ridge and northern caprock escarpments of the Llano Estacado. The climate is semi-arid with hot summers and is characterized by significant wind and dust storms in the springtime.

### Topography

Referencing the USGS Index of 7.5-minute Topographic Maps, the site is located entirely within the Paducah Breaks West, NM Quadrangle (32103-A6) in Eddy County, New

---

<sup>1</sup>Fenneman, Nevin M. (January 1917). ["Physiographic Subdivision of the United States"](#)

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico  
September 15, 2025 | Terracon Project No. KH247057



Mexico. Based on the 10-foot contour interval mapping of the quadrangle, the site has an elevation of approximately EL3264. Regionally, elevation drops gradually towards the south and east. The site is a petrochemical facility pad encompassing approximately 9.8-acres.

## Geology

Referencing the highest resolution publicly available geologic mapping<sup>2</sup>, the project site and surrounding vicinity is mapped as underlain by the **Windblown Sand (Qs)** dated to the Holocene Epoch of the Quaternary Geologic Period. The unit is comprised of sand and silt in sheets, and locally includes cover sand, dunes, and dune ridges. At the state level the entire region is mapped as **interlayered eolian (windblown) sands and piedmont-slope deposits** along the eastern flank of the Pecos River valley, primarily between Roswell and Carlsbad. Typically capped by thin eolian deposits.

## Karst Geology

Referencing the USGS National Karst Map<sup>3</sup> the site is not classified as either carbonate karst, evaporite karst, or piping pseudokarst. Nevertheless, based on aerial photographs there is an area less than 1-mile to the north of the site where numerous broad shallow sinkholes are clearly visible. These sinks are all roughly circular to subcircular in shape and have average diameters of 300-feet and a consistent depth average of 8- to 10-feet. These sinkholes are present in a northwest to southeast trending lineament. It is of note that an area of similar sinkhole development to the south in Living County, Texas, is classified as "evaporite rocks at or near the surface in a dry climate", and the karst-forming unit is identified as "caliche deposits". Based on these data, and our experience in the region, we suspect that the windblown sand unit which is mapped at the site forms an unconsolidated mantle over a stratum of caliche, similar to what is present at the sinkhole plain immediately north of the site. Typically, the caliche forms limited sinkholes where it has been dissolved away by surface water that ponds during the seasonal monsoon or significant winter snowmelt or rainfall. Accordingly, based on historic aerial photographs water could be seen pooling in the majority of these sinkholes during the August 2008 and August 2009 monsoon seasons. The water may pool in the sinkholes due to the relatively impermeable Dewey Lake Redbeds being

---

<sup>2</sup>Geologic Atlas of Texas, Hobbs Sheet, 1976, William Battle Phillips Memorial Edition.

<sup>3</sup>Weary, D.J., and Doctor, D.H., 2014, Karst in the United States: A digital map compilation and database: U.S. Geological Survey Open-File Report 2014-1156, 23 p.

**Karst Desktop Report Report**

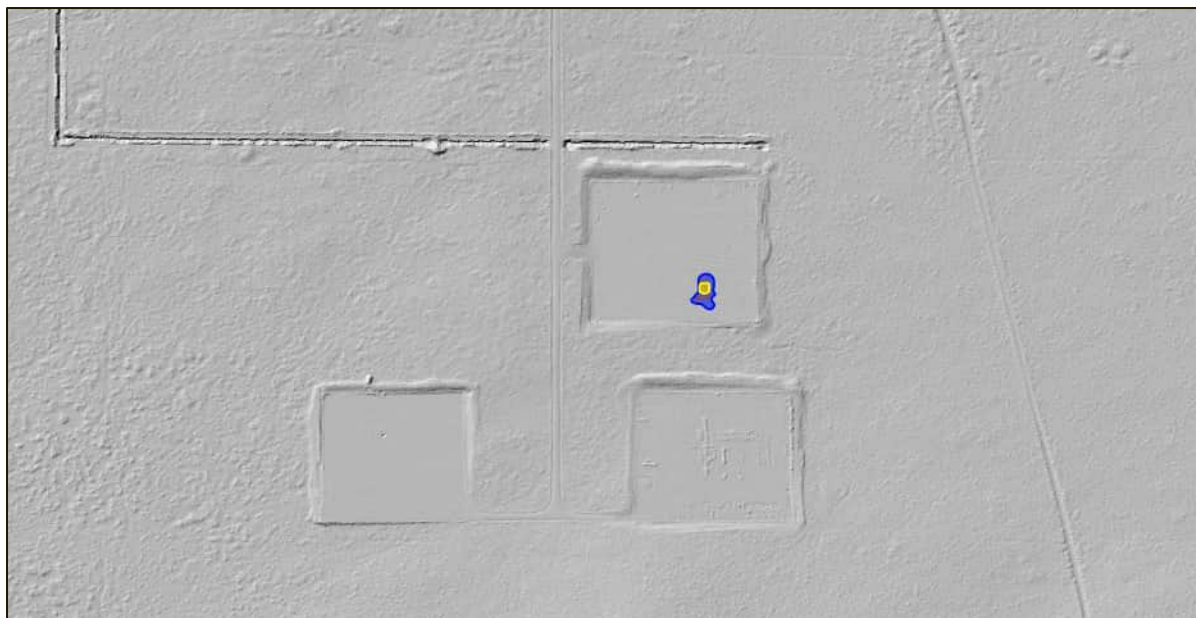
Snapping 12 CTB 2 | Eddy County, New Mexico  
September 15, 2025 | Terracon Project No. KH247057



present below the caliche stratum. The aerial photographs clearly also show vegetated drainage channels leading into the sinkholes, generally flowing from northwest to southeast following the topography of the sinkhole plain. Nearly all of the sinkholes are less than 10-feet in depth, suggesting that the thickness of the caliche stratum ranges from 8-to10-feet. Finally, caliche sinkholes do not typically connect to any extensive subsurface network as in classic karst terrains, except where the caliche has formed directly on top of the evaporite karst of the Rustler, Salado, or Castile Formations to the west of the project site along the Pecos River or to the north in the Nash Draw.

## Desktop Data Review

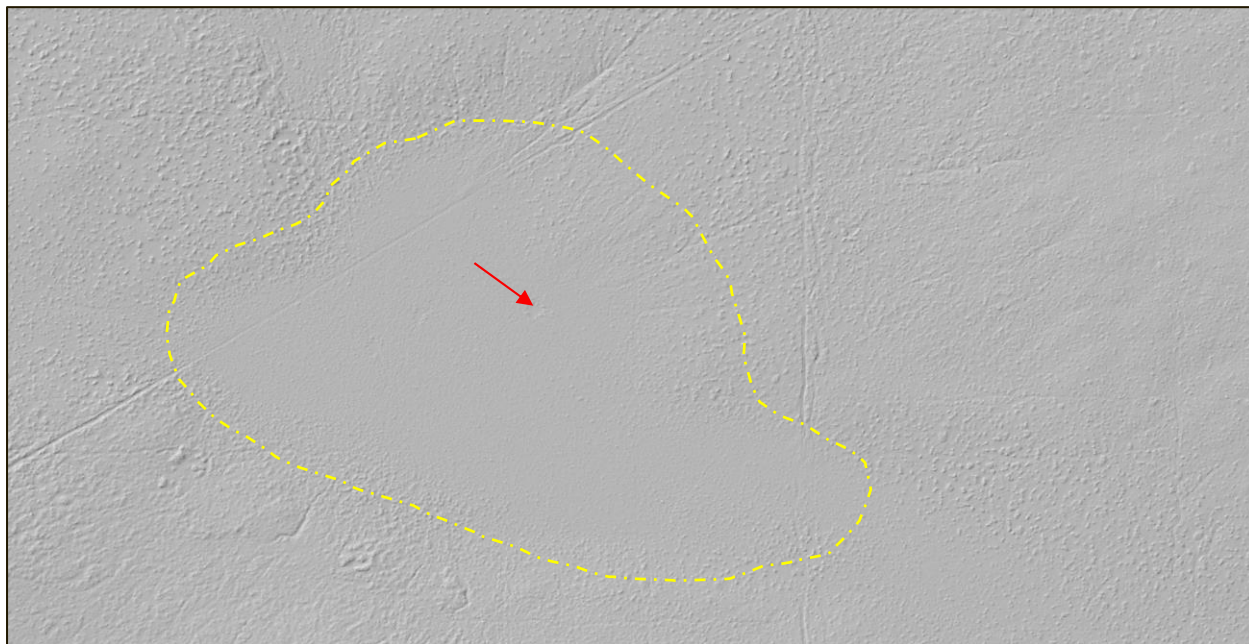
A review of the LiDAR derived shaded relief map and 2-foot contour layer across the site resulted in the identification of no suspect karst features or close depressions. Image 1 shows the LiDAR derived Hillshade layer of the project area and the surrounding region and there are no closed depressions or surficial characteristics of karst activities. This is not a surprise since the geology of the region is not conducive to significant karst development and the site is underlain by wind blown sediments. The approximate spill locations are shown by the colored polygons which do not appear near any surficial karst features. As was discussed above, there are some large, closed depressions located both north and south of the site that are likely related to the caliche stratum in the subsurface and an example is shown in image 2. The general closed depression which is internally drained is highlighted by the yellow dashed line and there is a slight potential subsequent collapse located at the base (red arrow). It is likely that water ponds at this location during precipitation events.



**Image 1.** Both the LiDAR derived Hillshade and 2-foot contour layers were utilized to scan for suspect karst features. As is shown in this image, no features were flagged.

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico  
September 15, 2025 | Terracon Project No. KH247057



**Image 2.** A broad and shallow closed depression shown by the yellow dashed polygon and a subsequent collapse near the base shown by the red arrow.

The broad and smooth bottomed closed depression shown in Image 2 is commonly referred to as a “mature” or paleokarst sinkhole. Mature sinkholes often have a roughly circular parapet outline, are bowl shaped, lacking any opening to the subsurface (i.e., “throat”) or showing evidence of active soil raveling or tension cracks around the parapet. Thus, whatever conduit or opening into the underlying karst aquifer that may have functioned to create the structure is probably now clogged with soil, which would act as a filter for water infiltrating from the surface.

## Recommendations

The results of the karst desktop data review serve as a surficial indication for suspect karst feature locations and karst potential concentrations. The fact that no suspect karst features were identified within and around the area of interest and that the geology is not technically considered a major karst formation, suggests that the karst risk onsite is relatively low. The closed depressions located both north and south of the site indicate that there is a karst potential in the region, but the occurrence is low and consistent with characteristics associated with mature sinkholes.

This report outlines the findings and opinions of our initial step in the proposed preliminary karst survey. Information presented herein is based on the review of publicly available information. This report is representative only of surficial indications from remote sensing data observable at the time the data was collected. It should be noted

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico  
September 15, 2025 | Terracon Project No. KH247057



that karst is a dynamic landform and significant changes can occur over time. Absence of a mapped resource does not mean that it is not present.

## General Comments

Our services and any correspondence or collaboration are intended for the sole benefit and exclusive use of our client for specific application to the project discussed and are accomplished in accordance with generally accepted geotechnical and geological engineering practices with no third-party beneficiaries intended. Any third-party access to services or correspondence is solely for information purposes to support the services provided by Terracon to our client. Reliance upon the services and any work product is limited to our client and is not intended for third parties. Any use or reliance of the provided information by third parties is done solely at their own risk. No warranties, either express or implied, are intended or made.

All parties are advised that any decisions or actions taken by any party based on the information contained herein, including decisions with financial implications are done solely at the risk of that party. By providing this information in this preliminary form, Terracon expressly disclaims any duties or obligations associated with the usage of this information for decision-making or design purposes.

In the event that changes to the nature, design, or location of the project, as outlined in this report, are planned, the preliminary conclusions and recommendations contained in this report shall not be used unless Terracon reviews the changes and either verifies or modifies the conclusions of this report in writing. As the project moves into the design phase, Terracon should be retained to develop and complete a scope of work that includes site-specific explorations.

**Karst Desktop Report Report**

Snapping 12 CTB 2 | Eddy County, New Mexico

September 15, 2025 | Terracon Project No. KH247057



## Figures

**Contents:**

Exhibit 1 – Site Map

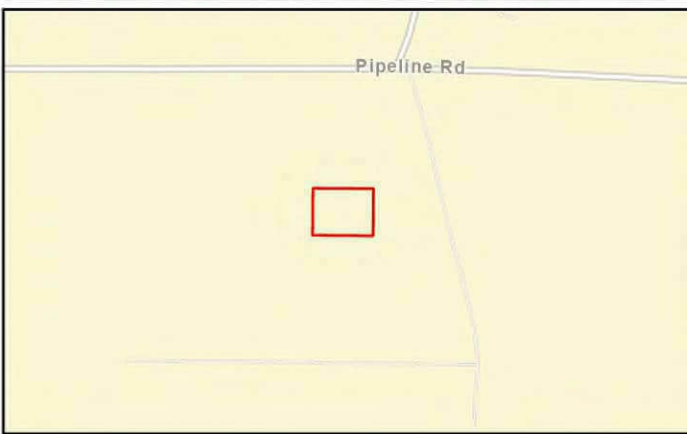
Exhibit 2 – Topography Map

Exhibit 3 – Geology Map

Note: All attachments are one page unless noted above.



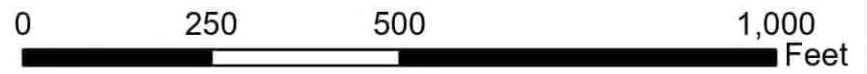
bing



**Legend**

- Project Boundary
- Approximate 1st Spill Location

DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap



Project No.:  
 KH247057  
 Date:  
 Aug 2025  
 Drawn By:  
 JDV  
 Reviewed By:  
 RKD

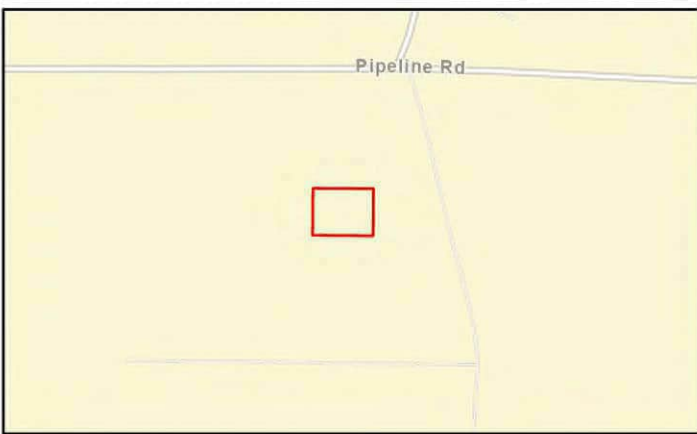
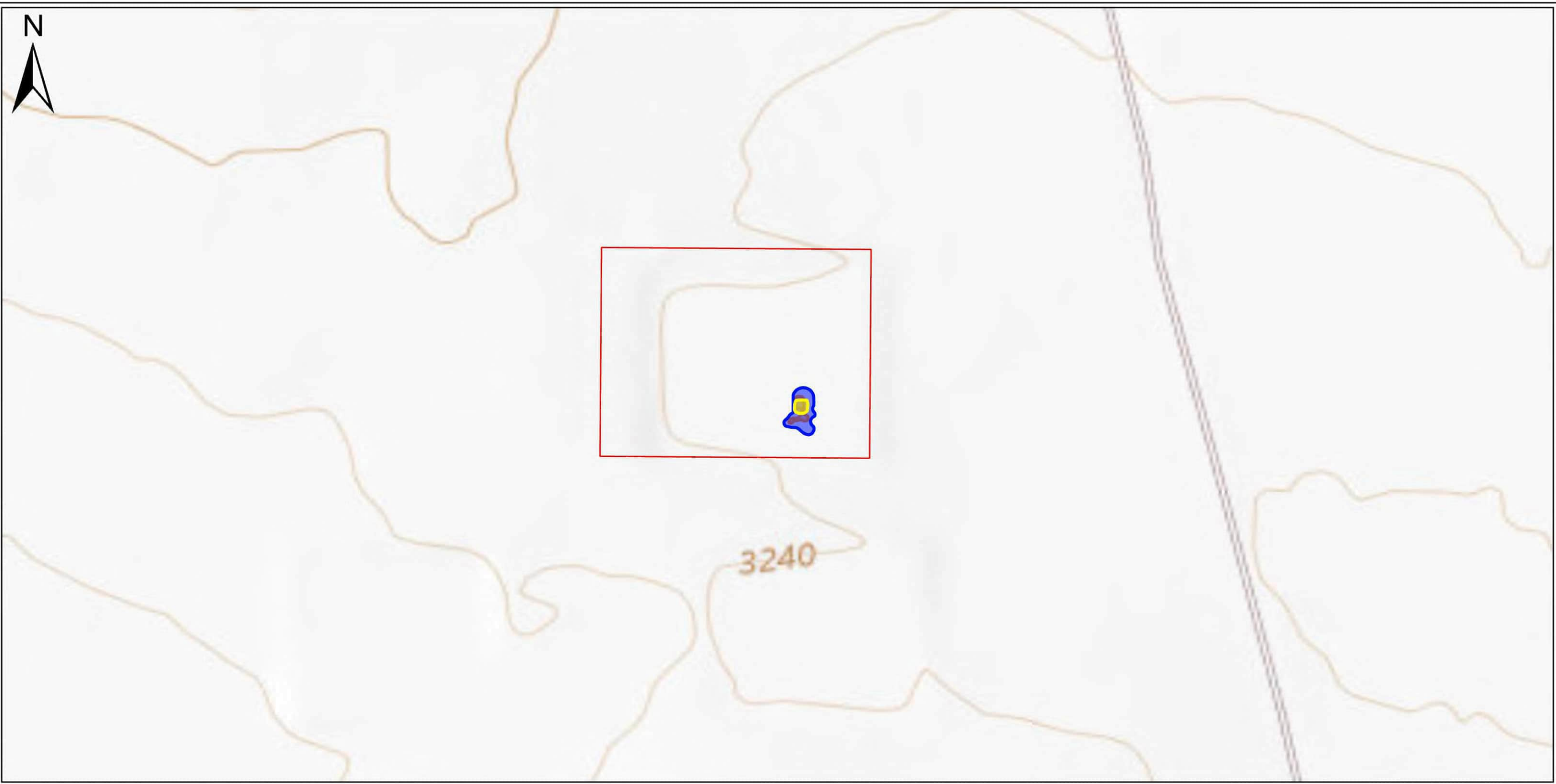
**Terracon**  
 4526 W Pierce St Carlsbad, NM 88220  
 PH. (575) 689-4020 terracon.com

**Site Map**

Snapping 12 CTB 2  
 Karst Desktop Review

**Exhibit**

**1**



**Legend**

- Project Boundary
- Approximate 1st Spill Location

DATA SOURCES:  
ESRI WMS - World Aerial Imagery, OpenStreetMap



Project No.:  
KH247057  
Date:  
Aug 2025  
Drawn By:  
JDV  
Reviewed By:  
RKD



4526 W Pierce St Carlsbad, NM 88220  
PH. (575) 689-4020 terracon.com

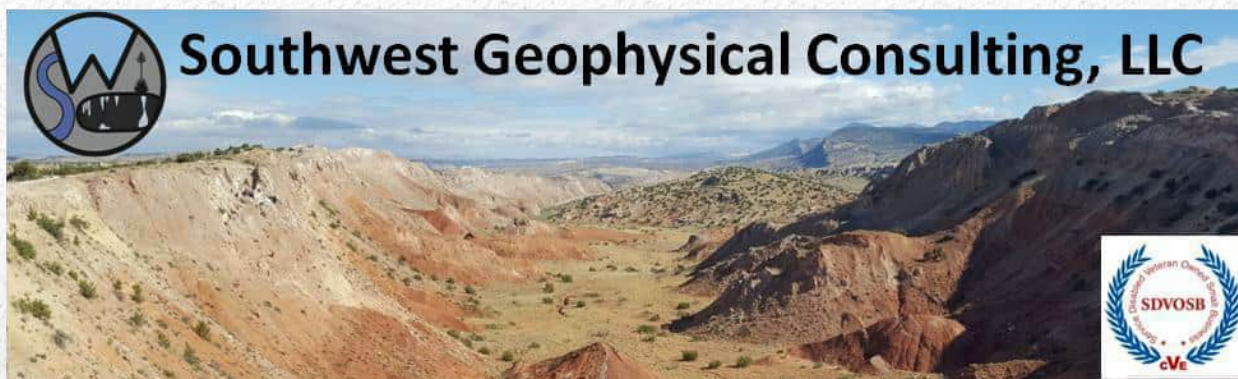
**Topography Map**

Snapping 12 CTB 2  
Karst Desktop Review

**Exhibit**

**2**

**APPENDIX C**  
**Aerial/Pedestrian & Geophysical Karst Report**



# **Environmental Karst Study Report Devon-Snapping 12 CTB 2 Eddy County, New Mexico**

**Prepared For:**

**Terracon Consultants, Inc.**

**5847 50th Street**

**Lubbock, TX 79424**

**Within 200 feet of the spill delineation boundary:**

**Negative**  **Positive for surface karst**

**Stable**  **Unstable Ground**

**Karst Monitor Recommended**

**February 23, 2026**

TRCN-003-20260116

©2026 – Southwest Geophysical Consulting, LLC. All rights reserved.

**Published by:**

Southwest Geophysical Consulting, LLC  
5117 Fairfax Dr. NW  
Albuquerque, NM 87114  
(505) 585-2550  
www.swgeophys.com

**Prepared by:**

Garrett Jorgensen Olague  
Senior Field Geologist  
garrett@swgeophys.com

**Reviewed by:**

David Decker, PhD, PG, CPG  
CEO, Principal Geologist  
dave@swgeophys.com

**Prepared for:**

Terracon Consultants, Inc.  
5847 50th Street  
Lubbock, TX 79424

**Point of Contact:**

Chuck Smith  
(806) 300-0140  
chuck.smith@terracon.com

**MMXXVI**

**TABLE OF CONTENTS**

FRONT MATTER..... i

TABLE OF CONTENTS.....ii

LIST OF FIGURES.....iii

LIST OF TABLES.....iii

1.0 INTRODUCTION..... 1

    1.1 Goals of this Study..... 1

    1.2 Summary of Findings..... 1

    1.3 Affected Environment..... 1

    1.4 Limitations of Report..... 3

2.0 LOCATION AND DESCRIPTION OF STUDY AREA..... 4

    2.1 Description of Site..... 4

    2.2 Local Geology Summary..... 5

    2.3 Description of Survey..... 6

        2.3.1 Surface Karst Survey..... 6

        2.3.2 Geophysical Survey..... 8

3.0 RESULTS..... 10

    3.1 Surface Karst Survey..... 10

    3.2 Geophysical Survey..... 11

4.0 DISCUSSION..... 12

5.0 SUMMARY..... 14

6.0 DISCLOSURE STATEMENT ..... 14

7.0 REFERENCES..... 16

8.0 GLOSSARY OF TERMS..... 18

9.0 ATTESTATION ..... 20

**LIST OF FIGURES**

Figure 1: Karst occurrence zone overview..... 2

Figure 2: Land ownership and PLSS overview..... 4

Figure 3: Geology overview ..... 5

Figure 4: Surface karst survey overview ..... 7

Figure 5: Geophysical survey overview ..... 8

Figure 6: Surface karst survey results ..... 10

Figure 7: 2D inverted resistivity sections..... 11

Figure 8: Data overlay ..... 12

**LIST OF TABLES**

Table 1: Survey Line Data Table ..... 9

Table 2: Software Information and Settings..... 9

## 1.0 INTRODUCTION

This report was commissioned by Terracon Consultants, Inc. (hereinafter referred to as "the client"), on January 16, 2026, for the purpose of conducting an environmental karst study within an area encompassing the Devon-Snapping 12 CTB 2 release site (hereinafter termed "S12C2") centered at N 32.059897° W 103.734581°

### 1.1 Goals of this Study

The goals of this study are to conduct a surface karst inventory and provide the client with the location and description of any surface karst features located within 200 feet (61 meters) of the spill delineation boundary (as defined by 19.15.29.12 NMAC<sup>[1]</sup>), and to determine whether stable ground exists (as defined by 19.15.2 NMAC Definitions<sup>[2]</sup>) within the spill boundary of the Devon-Snapping 12 CTB 2 release as provided by the client via e-mail (**1st.kmz** and **3rd Release nAPP2508758656 (5,560 Sq Ft).kmz**) on January 16, 2026, using electrical resistivity imaging<sup>[3]</sup>.

### 1.2 Summary of Findings

- **No surface karst features exist within 200-feet (61-meter) of the spill delineation boundary.**
- **No anomalies consistent with subsurface air- or water-filled voids were found within the S12C2 geophysical survey area, indicating the zone beneath the geophysical survey is not subject to collapse.**
- **Flat-lying stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground within the 200-foot survey boundary.**

### 1.3 Affected Environment

The S12C2 project site is located in evaporite karst terrain, a landform that is characterized by underground drainage through solutionally enlarged conduits. Evaporite karst terrain may contain sinkholes, sinking streams, caves, and springs. Sinkholes leading to underground drainages and voids are common. These karst features, as well as occasional fissures and discontinuities in the bedrock, provide the primary sources for rapid recharge of the groundwater aquifers of the region. Additionally, karst may develop by hypogene processes involving dissolution by upwelling fluids from depth independent of recharge from the overlying or immediately adjacent surface. Hypogene karst systems may not be connected to the surface and can remain undiscovered unless encountered during drilling or excavation.

Karst features are delicate resources that are often of geological, hydrological, biological, and archeological importance, and should be protected. The four primary concerns in these types of terrain are environmental issues, worker safety, equipment damage, and infrastructure integrity.

The Bureau of Land Management (BLM) categorizes all areas within the Carlsbad Field Office (CFO) zone of responsibility as having either low, medium, high, or critical cave potential based on geology, occurrence of known caves, density of karst features, and potential impacts to freshwater aquifers<sup>[4]</sup>. These designations are also recognized by the New Mexico State Land Office (NMSLO). This project occurs within a **MEDIUM** karst occurrence zone (MKOZ)<sup>[5]</sup> (**Figure 1**).

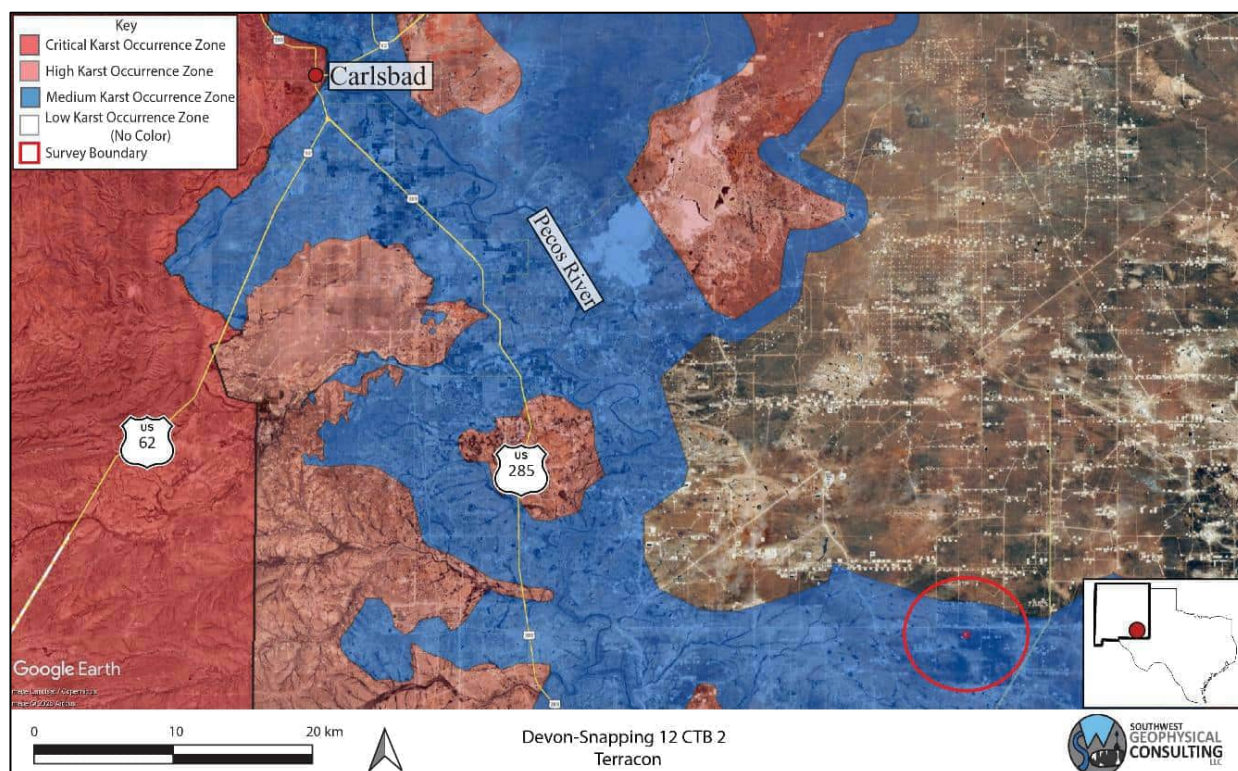


Figure 1: Karst occurrence zone overview. Background image credit: Google Earth. Image date: August 21, 2024. Image datum: WGS-84.

A medium karst occurrence zone is defined as an area in known soluble rock types that may have a shallow insoluble overburden. These areas may contain isolated karst features such as caves and sinkholes. Groundwater recharge may not be wholly dependent on karst features, but the karst features still provide the most rapid aquifer recharge in response to surface runoff<sup>[4]</sup>.

**Due to the rapidity with which evaporite karst develops, each location within a BLM-CFO-designated critical or high karst occurrence zone must be assessed on an individual basis to determine the existence of surface karst features and the possibility of sub-surface karst development each time a release occurs.**

#### **1.4 Limitations of Report**

This report should be read in full. No responsibility is accepted for the use of any part of this report in any other context or for any other purpose or by third parties. This report does not purport to give legal advice. Legal advice can only be given by qualified legal practitioners.

This report has been prepared for the use of Terracon Consultants, Inc. in accordance with generally accepted consulting practices. Every effort has been made to ensure the information in this report is accurate as of the time of its writing. This report has not been prepared for use by parties other than the client, their contracting party, and their respective consulting advisors. It may not contain sufficient information for the purposes of other parties or for other uses.

This report was prepared upon completion of the associated fieldwork using a standard template prepared by Southwest Geophysical Consulting and is based on information collected prior to fieldwork, conditions encountered on site, and data collected during the fieldwork and reviewed at the time of preparation. Southwest Geophysical Consulting disclaims responsibility for any changes that might have occurred at the site after this time. The interpreted results, locations, and depths noted in this report (if applicable) should be taken as an interpretation only and no decision should be based solely on this information. Physical verification of aerial imagery analysis results in the field should be conducted prior to using this information for remediation planning. Physical verification of geophysical results using geotechnical methods should be conducted.

To the best of our knowledge, information contained in this report is accurate at the date of issue; however, conditions on the site can change over a short period of time and, therefore, the information in this report should not be used beyond two years, and shall not be used beyond five years past the date of the imagery collection reported in section **2.3 Description of Survey**, as per BLM guidelines. Large weather events can shorten this time period as areas subject to karst development can rapidly form new features subsequent to these events.

## 2.0 LOCATION AND DESCRIPTION OF STUDY AREA

### 2.1 Description of Site

The S12C2 site is located in Eddy County, New Mexico, 61.2 kilometers (38.0 miles) southeast of Carlsbad, south of Pipeline Road, west of Orla Road, and east of Buck Jackson Road. The spill delineation boundary is located within the NW ¼ section of section 12, NM T26S R31E<sup>[6]</sup> (**Figure 1** and **Figure 2**). The region has rolling terrain with karstification occurring in the gypsite soils and underlying gypsum and dolomite bedrock<sup>[7]</sup> (see section **2.2 Local Geology Summary** for further information). The climate in this area of southeast New Mexico is semi-arid with an average annual precipitation of approximately 13 inches, of which about two-thirds falls as rain during summer thunderstorms from June to October. Summers are hot and sunny while winters are generally mild, with an average maximum temperature of 96°F in July and an average minimum temperature of 28°F in January<sup>[8]</sup>. This area is within the Apacherian-Chihuahuan Mesquite Upland Scrub as defined by the Southwestern Regional ReGAP Vegetation map<sup>[9]</sup> and the vegetation consists mostly of mesquite shrubs and other desert scrub including viscid acacia, whitethorn acacia, New Mexico juniper, and redberry juniper. The spill delineation boundary is located within an MKOZ<sup>[5]</sup> (**Figure 1**) and within BLM-CFO-managed land<sup>[10]</sup> (**Figure 2**).

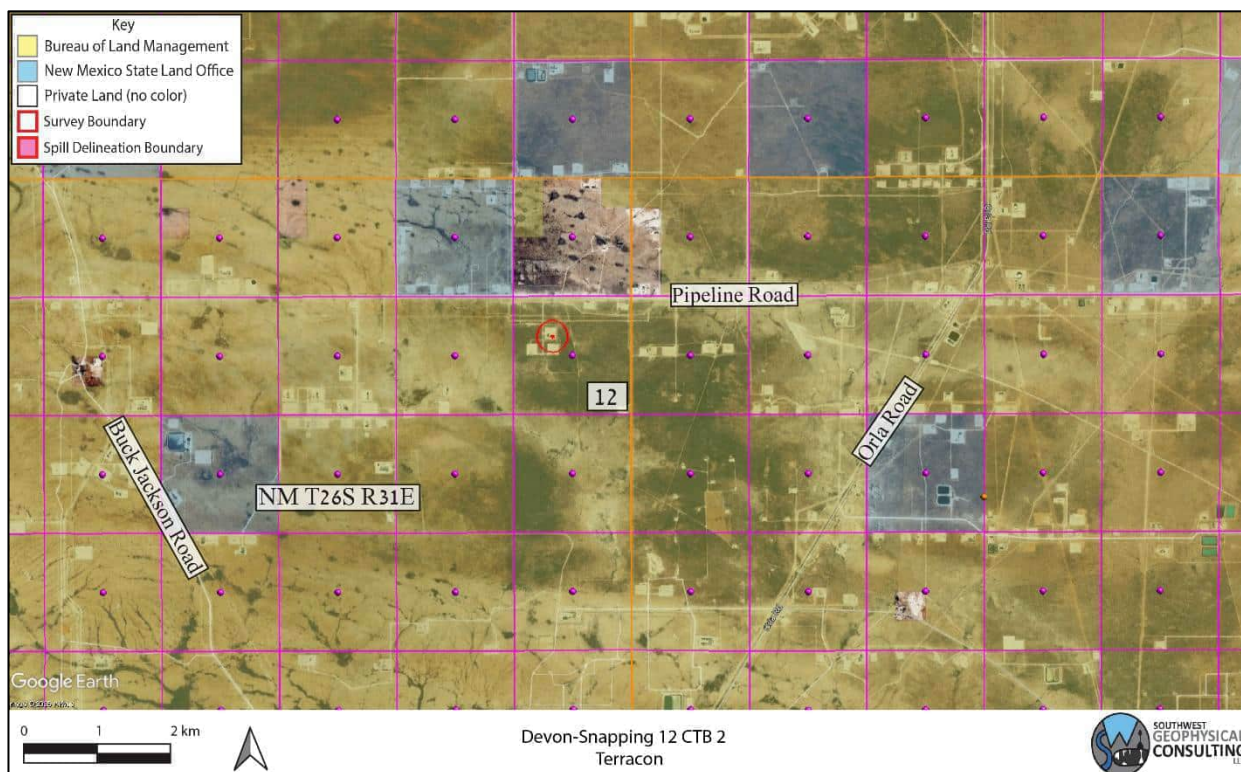


Figure 2: Land ownership and PLSS overview. Background image credit: Google Earth. Image date: December 20, 2023. Image datum: WGS-84.

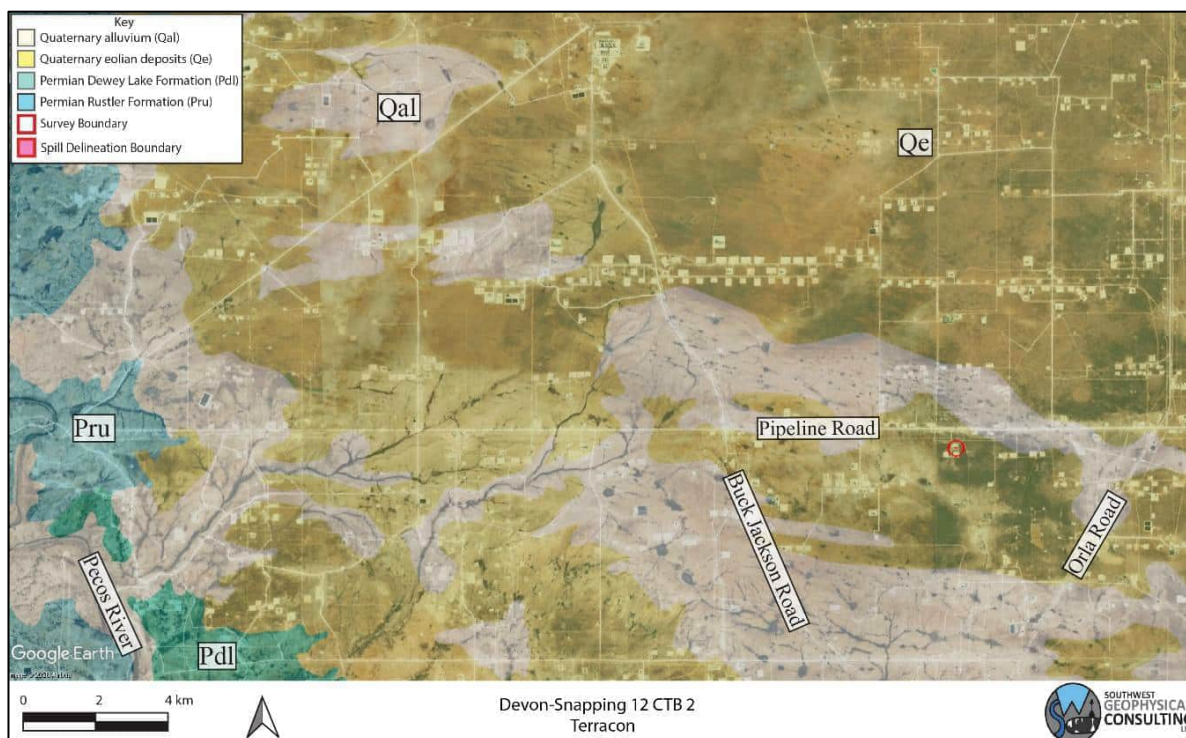
## 2.2 Local Geology Summary

The site for the S12C2 survey is located at an elevation of 989 meters (3,245 feet), ± 3 meters (9.8 feet), and is located within a region entirely underlain by the Permian Dewey Lake (Pdl) and Rustler (Pru) Formations. The area is mantled by thin gypsiferous soils (gypsite), Quaternary alluvium (Qal), and eolian sands (Qe)<sup>[11]</sup> up to 5 meters in depth (**Figure 3**).

The Dewey Lake Formation is composed of calcite-cemented, hematite-stained quartz sand grains<sup>[12]</sup> and occasional gypsum lenses and can, in favorable conditions, form cavernous porosity within 30 meters of the top of the Rustler Formation<sup>[13]</sup>. The Dewey Lake Formation is also known to be highly fractured near areas of heavy halite dissolution such as Nash Draw (approximately 30 kilometers north), and these fractures can act as hydrologic conduits.

The Rustler Formation is an evaporite facies and is composed mainly of thin siltstones and sandstones interbedded with claystones, dolomite and gypsum<sup>[12]</sup>, and contains both karst-forming strata (the Forty-niner and Tamarisk members) and two shallow aquifers (the Magenta and Culebra Dolomite members). The Forty-niner and Tamarisk members are known to have highly developed karst features including large voids and solution-enlarged fractures<sup>[14]</sup>.

The survey area is covered by the easily accessible Geologic Map of New Mexico (2003) at 1:500,000 scale<sup>[15]</sup> and the Digital Geologic Map of New Mexico in ARC/INFO Format<sup>[11]</sup>.



**Figure 3: Geology overview.** Geology map credit: The Digital Geologic Map of New Mexico in ARC/INFO Format. Background image credit: Google Earth. Image date: December 20, 2023. Image datum: WGS-84.

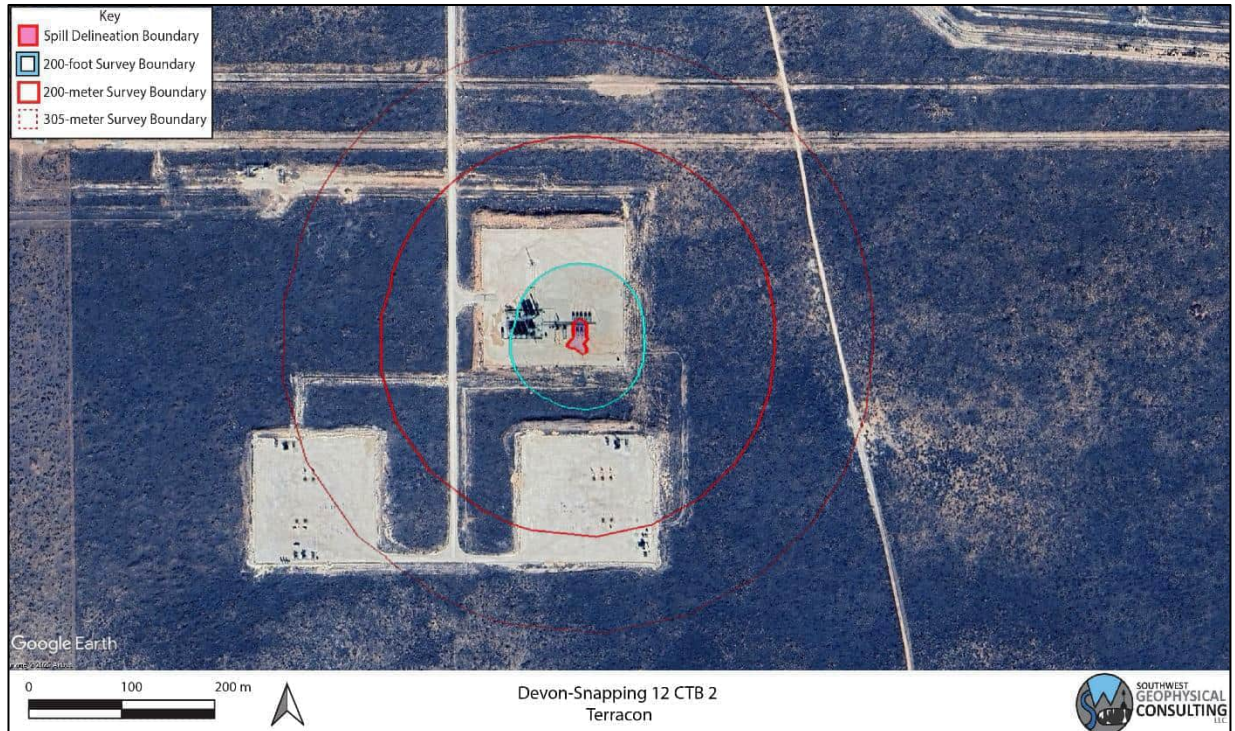
## 2.3 Description of Survey

### 2.3.1 Surface Karst Survey

Southwest Geophysical Consulting, in partnership with SWCA Environmental Consultants, provides surface karst surveys using small, uncrewed aerial systems (sUAS) that are flown by qualified, FAA licensed drone pilots and that meet the stringent Bureau of Land Management – Carlsbad Field Office requirements for both pedestrian and aerial karst surveys.

The surface karst survey includes a desk study prior to the flight which allows us to provide client feedback in the event of any previously known karst features in the area. The desk study is typically performed out to 305 meters (1,000 feet) from the spill delineation boundary per New Mexico Oil Conservation Division guidance <sup>[1]</sup> (**Figure 4**). The study was performed using satellite and aerial imagery from Google Earth Pro dated December 20, 2023 (please note features less than one meter in diameter are generally not visible using this method); the Southwest Geophysical Cave and Karst Database dated December 16, 2025<sup>[16]</sup>; the Paduca Breaks West, NM, 1:24,000 quad, 1973, USGS topographic map; and the latest lidar imagery from CalTopo.com. Please note that we use older topographic maps because newer maps have had caves removed from them. These searches and queries returned no results within the survey boundary.

Surface karst surveys are conducted by sUAS at low elevation within 200 meters of the spill delineation boundary<sup>[4]</sup> (**Figure 4**) following a preplanned raster pattern flightpath designed for the purpose of generating at least 75% imagery overlap. The collected high-resolution, georeferenced imagery is stitched together to develop orthomosaic imagery which is further developed into a digital elevation model (DEM); the DEM is then processed into a local relief model (LRM) (**Figure 6**). This LRM is color coded to enhance differences in elevation of as little as five centimeters. The orthoimagery, DEM, and LRM are uploaded to a server where they are analyzed by an experienced karst geologist. Finally, the data is reviewed by a senior karst geologist for quality assurance and downloaded into a table for inclusion in a written report<sup>[17]</sup>.



**Figure 4: Surface karst survey overview. Background image credit: Google Earth. Image date: December 20, 2023. Datum: WGS-84.**

The resolution of the orthoimagery is clear enough that features as small as 10 centimeters can be positively identified in most circumstances. Occasionally there are ambiguous features identified during an aerial survey that will need to be checked in the field if they are impacted by the proposed remediation efforts. Specifically, it is difficult to tell the difference between solution tubes, abandoned uncased well bores, and some burrows in drone imagery. If an ambiguous feature is located during imagery analysis, it is marked with a yellow dot in **Figure 6**. If a feature of any likelihood is subsequently verified in the field prior to publication of the report, the dot will be changed to a red triangle if confirmed as a karst feature or deleted if not.

The imagery for this study was collected via sUAS by Pat Lagodney of SWCA on February 4, 2026. Surface karst features may have developed after this date and will not be noted in this report. Imagery analysis was completed by Dave Decker of Southwest Geophysical Consulting on February 5, 2026.

### 2.3.2 Geophysical Survey

For this survey, an Advanced Geosciences Inc. (AGI) SuperSting™ Wifi R8 with an 8-channel switchbox, a 42-electrode array of 40-centimeter-long (16-inch) stainless-steel electrodes, and a tablet controller were used to image the subsurface. The Spill Delineation Boundary provided by the client was used to plan the resistivity lines and define the survey boundaries. The survey consisted of two resistivity lines in a dipole-dipole strong-gradient configuration, with line S12C201 laid out north to south and line S12C202 laid out east to west. Both lines consisted of 42 electrodes at 5-meter electrode spacing, resulting in 205-meter-long arrays (**Figure 5, Table 1**).

A preconfigured command file was used to run the data collection (DDSG42) which combines both a dipole-dipole and strong gradient survey. This electrode configuration provided a depth of investigation of 41 meters (135 feet) in this location with a resolution of 2.5 to 3.0 meters (8.2 to 9.8 feet) within the first 5 to 8 meters (16 to 26 feet) from the surface. A Leica GS18 GPS was used to record electrode locations and elevations. On this survey, the estimated horizontal error mean was 7 cm (2.75 inches), and the estimated vertical error mean was 10 cm (3.9 inches).



**Figure 5: Geophysical survey overview.** Two survey lines were conducted with 42 electrodes at 5-meter spacing (yellow dots denoted with blue numbers). Background image credit: Google Earth. Image date: December 20, 2023. Datum: WGS-84.

**Table 1** provides basic line data. Detailed information for each line including electrode number, location in latitude/longitude (decimal degree format), and elevation in meters can be found in the accompanying data files.

**Table 1: Survey Line Data Table.** The .kmz file contains all the points for the survey line listed in the file name. These data are available in the accompanying files S12C2\_ERI\_Points.xlsx and TRCN-003-20260116\_S12C2\_Data\_Files.kmz.

File Name:	Completed By:	Date:
S12C201.kmz	Michael Jones – Field Geophysicist Britt Bommer – Field Geologist Ryan Palmer – GIS Specialist	2/5/2026
S12C202.kmz		

EarthImager™ 2D software was used to download and process the data and to provide the model used to make our interpretations. The design of the survey and the orientation of each of the lines provides the information necessary to make the determination of “stable” or “unstable” ground at this site.

A typical starting model was used for the data processing due to the two-layer model of the geology in the area; specifically, generally high-resistivity gypsum and dolomite at the surface and low-resistivity saturated gypsum and dolomite bedrock at depth. The starting model used was “average apparent resistivity” and a default inversion setting of “surface,” with a minimum apparent resistivity set to 0.1 Ohm-meters (Ohm-m or Ω-m) and a max apparent resistivity set to 100,000 Ω-m (**Table 2**).

**Table 2: Software Information and Settings**

Software Name:	EarthImager™ 2D
Version:	2.4.4.649
Starting Model:	Average Apparent Resistivity
Default Inversion Settings:	Surface
Changes to Default Inversion Settings:	Max Apparent Resistivity = 100 kΩ-m Min Apparent Resistivity = 0.1 Ω-m

**Note:** Raw data files (.stg files for EarthImager™ 2D) and processed data (.trn files, terrain files for surface correction in EarthImager™ 2D and .out files, the processed .stg files) are available upon request.

All field work, including setup, stow, and travel, was completed by Michael Jones, Britt Bommer, and Ryan Palmer on February 5, 2026.

### 3.0 RESULTS

#### 3.1 Surface Karst Survey

The desk study and surface karst survey showed no surface karst features are located within the 200-foot (61 meter)<sup>[1]</sup> survey area surrounding the spill delineation boundary (Figure 6).

No springs exist within the 305-meter (1,000-foot)<sup>[1]</sup> survey boundary (Figure 6).

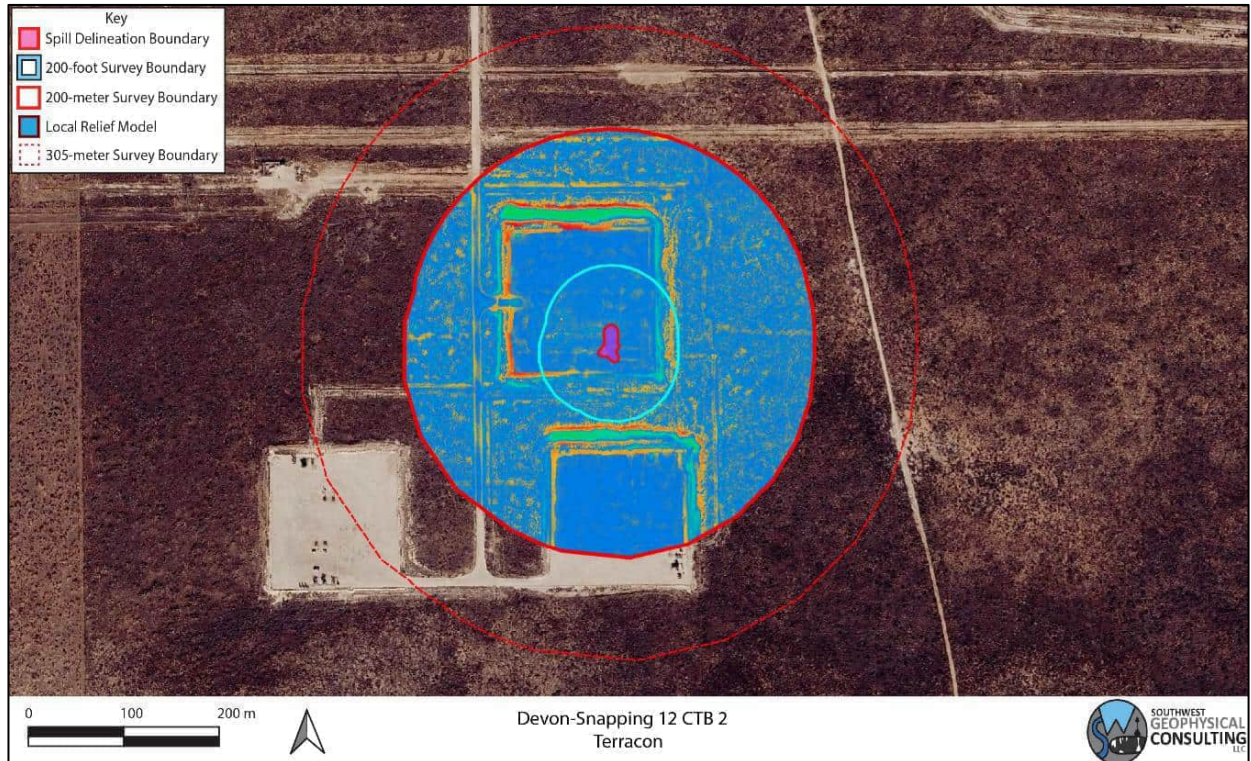


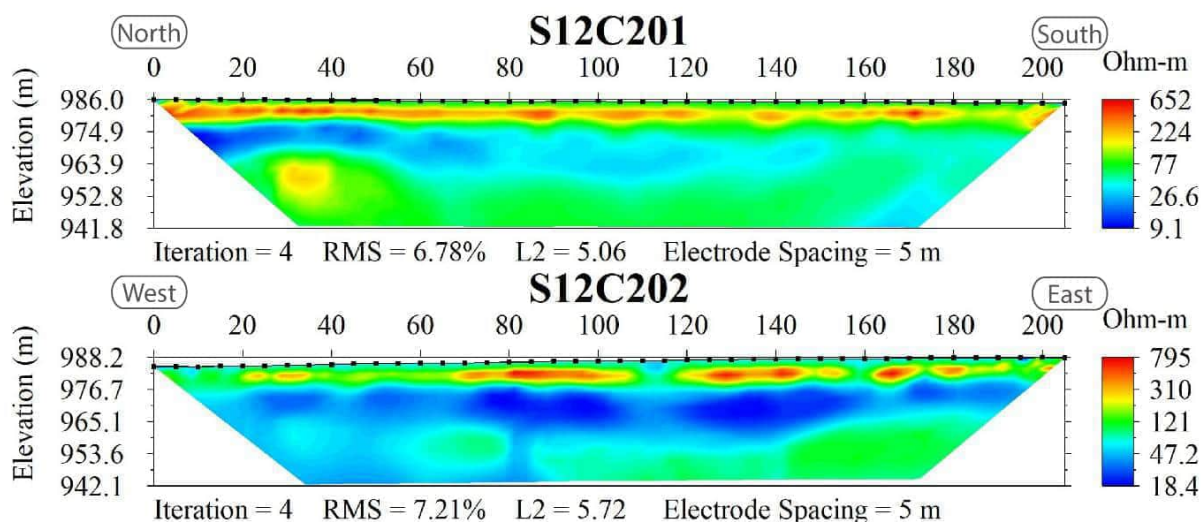
Figure 6: Surface karst survey results. Background image credit: Google Earth. Image date: December 20, 2023. Image datum: WGS-84.

The lack of surface karst features does not mean the area is not karstified and the survey area may still contain buried karst features. Caution should be exercised while clearing brush and during any excavation, drilling, or construction operations. Employing a BLM-CFO-approved karst monitor on site during these operations should be considered.

### 3.2 Geophysical Survey

Electrical resistivity tomography forms images of the subsurface by causing a current to flow through the rock and soil and then measuring the resistance of these materials as the current flows through them. This measurement is taken many times and the resulting data, once processed, is used to produce a model of the subsurface (**Figure 7**). This model is produced using "non-unique" solutions, which means that there are many models and interpretations which will satisfy the data. Using experience and knowledge of the local geology, a high-confidence model can be established and used to develop an accurate understanding of what lies below the surface. This survey was conducted with the express purpose of locating subsurface voids and does not purport to find paleokarst (old, non-active karst features that have been filled in with sand and sediment) or nascent karst features below the resolution limit of the survey.

The results of this study indicate a well-layered geologic system with resistivities between 9 and 795 Ohm-m (**Figure 7**). Please keep in mind when viewing the 2D inverted resistivity sections that color maps can be widely different for each view. Always check the color map located on the right side of the image when viewing the 2D images to ensure you understand the range of resistivities presented. Distances along the top and depths along the left side are in meters. The color map along the right side is in Ohm-m. Due to the nature of the survey, shallower zones have higher resolution between electrodes than deeper zones; therefore, small features at depth will not be visible.



**Figure 7: 2D inverted resistivity sections. Reds and oranges indicate higher resistivity values. Yellows and greens are medium-resistivity values. Blues are low-resistivity values. Please note that the color scale is relative.**

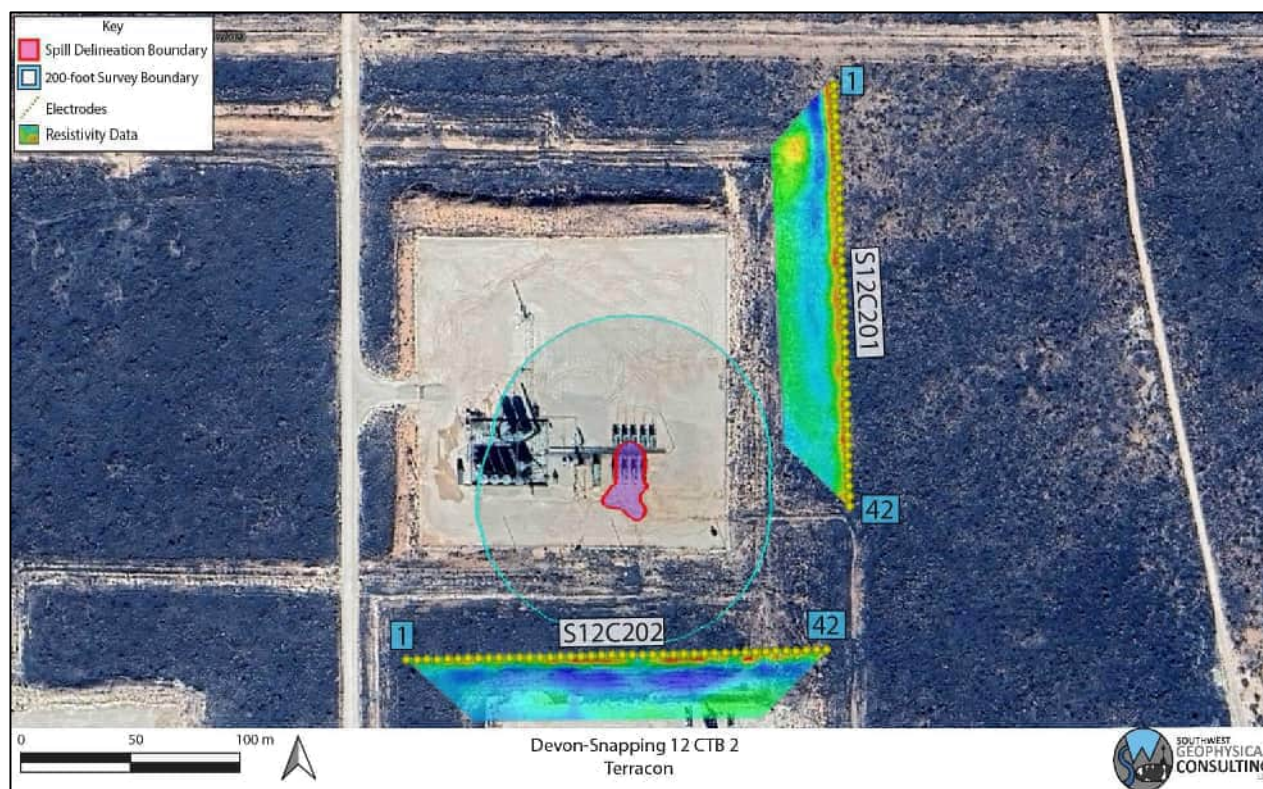
#### 4.0 DISCUSSION

No surface karst features were located within 200 meters of the spill delineation boundary.

No anomalies consistent with air-filled subsurface voids were found within the S12C2 survey area. However, small solutionally enlarged voids or fractures at or near the resolution limit of the survey (2.5 – 3.0 meters) may be present. Slightly higher-than-average resistivity areas less than 10 meters beneath the surface are interpreted as sand, caliche, or sandstone of the Dewey Lake Formation, or dry caliche soils and gypsum or dolomite bedrock of the Rustler Formation. Due to their much lower resistivity values when compared with significant subsurface voids, these features should not be a concern during remediation efforts<sup>[18]</sup> (**Figure 7** and **Figure 8**).

Low-resistivity areas between 9.1 – 20 Ohm-m may either represent fluid from the brine release, surface-to-subsurface hydrologic pathways, or a layer of either clays and halite lenses or moist to saturated layers within the Dewey Lake or Rustler Formations (**Figure 7**).

Please remember that these are interpretations made from knowledge of the local subsurface materials and experience. **They remain interpretations until verified by geotechnical methods.** Employing a BLM-CFO-approved karst monitor on site during any drilling and/or remediation activities that require excavation below four feet in depth should be considered.



**Figure 8: Data overlay. Colored trapezoids are 2D inverted resistivity lines. Background image credit: Google Earth. Image date: December 20, 2023. Datum: WGS-84.**

Fracture sets within the subsurface can act as hydrologic pathways to the water table. Rapid dissolution of gypsum can occur along these pathways creating solution-enlarged fractures, and in some cases, voids within months to years. For this reason, this survey is valid only for this remediation event.

Within karst terrains like the project site, small air- or sediment-filled voids and/or brecciated zones and solutionally enlarged fractures that are below the resolution limit of the survey (2.5 – 3.0 meters) may exist; these may be encountered during excavation, and if so, should be evaluated by a karst specialist prior to continued work.

## 5.0 SUMMARY

- **The S12C2 survey contains no surface karst features within 200 feet (61 meters) of the spill delineation boundary.**
- No surface karst feature exists within the 200-meter survey boundary, and no springs are noted within the 305-meter survey boundary.
- **No shallow anomalies interpreted as large voids or related karst features that would present a danger to equipment operators are located within the geophysical survey area.**
- Intercepting a void during remediation is unlikely, but still possible. Small voids or solutionally enlarged fractures below the resolution limit of the survey may be encountered.
- **Well-layered stratigraphy is interpreted to exist beneath the area where the geophysical survey was conducted, indicating stable ground in the area of the subsurface investigation.**
- When conducting any remediation activities in this area, employing a BLM-CFO-approved karst monitor on site should be considered.

## 6.0 DISCLOSURE STATEMENT

Karst occurrence zones are prone to rapid karst formation and warrant careful planning and engineering to mitigate karst-forming processes that could be accelerated by removal of surface cover or the vibrations associated with heavy equipment used in the remediation process.

Mitigation measures for any karst features revealed during excavation shall be approved by the Bureau of Land Management – Carlsbad Field Office and follow the Natural Resources Conservation Service Conservation Practice Standard for Karst Sinkhole Treatment, Code 527, or the Bureau of Land Management Cave and Karst Management Handbook, H-8380-1.

Vigilance during remediation activities is paramount. If voids are encountered during excavation, contact the Bureau of Land Management Karst Division at (575) 234-5972, the New Mexico State Land Office Surface Resources Division at (505) 827-5768, or a BLM-CFO-approved karst contractor and request an on-site investigation from a karst expert if one is not already on site. A karst consultant can generally be available in Eddy County within five hours.

Approved karst monitors should have karst feature identification training, at least two years of supervised experience identifying karst features, wilderness first aid training, SRT training, confined space training, gas monitor training, and a minimum of SPAR cave rescue training through NCRC. They should have with them the proper gear and be prepared both physically and mentally to enter a collapse feature within minutes to perform a rescue if needed. Monitoring services with qualified karst monitors, as well as cave surveys and geophysical surveys, are available from Southwest Geophysical Consulting.

Under no circumstances should an untrained, inexperienced person enter a cave, pit, sinkhole, or collapse feature. All field employees of Southwest Geophysical Consulting have extensive caving experience and the ability to determine whether entry into a karst feature is safe or presents a hazard. In the event it is necessary to enter a karst feature, Southwest Geophysical Consulting can provide these services on request.

Cave and karst resource inventory reports, karst feature investigations, and geophysical reports (along with the associated data files) commissioned at the request of the land manager should be submitted to BLM-CFO at [blm\\_nm\\_karst@blm.gov](mailto:blm_nm_karst@blm.gov).

Cave and karst resource inventory reports for the NMSLO should be submitted to the respective project manager.

Environmental karst reports should be submitted to the appropriate project manager at the New Mexico Oil Conservation Division.

## 7.0 REFERENCES

- 1 Division, O. C. *Title 19, Chapter 15, Part 29* (Oil Conservation Division, 2018).
- 2 NMSLO. (ed Oil Conservation Division) (New Mexico State Land Office, Santa Fe, NM, 2018).
- 3 Decker, D. & Jorgensen, G. L. *Environmental Karst Surveys White Paper* (Southwest Geophysical Consulting, LLC, 2024).
- 4 Goodbar, J. R. Vol. BLM Management Handbook H-8380-1 (ed Carlsbad Field Office) 59 (Bureau of Land Management, Denver, CO, 2015).
- 5 Decker, D., Trautner, E. & Palmer, R. (Bureau of Land Management - Carlsbad Field Office, 2025).
- 6 Earthpoint. *Earthpoint Tools for Google Earth*, <<https://www.earthpoint.us/Townships.aspx>> (2022).
- 7 Decker, D. D., Land, L. & Luke, B. Characterization of Playa Lakes in the Gypsum Karst of Southeastern New Mexico and West Texas, USA. *Oklahoma Geological Survey Circular 113 113* (2021).
- 8 W.R.C.C. *National Climate Data Center 1981-2010 Normal Climate Summary for Carlsbad, New Mexico (291469)*, 2010).
- 9 Southwest Regional Gap Analysis Project (SWReGAP). *Land Cover Data*. <<https://swregap.org/data/landcover/>> (2016).
- 10 NMSLO. Digital overlay (KML) of the surface land ownership in New Mexico (New Mexico State Land Office, Santa Fe, NM, 2024).
- 11 Green, G. N. & Jones, G. E. *The Digital Geologic Map of New Mexico in ARC/INFO Format*, <<https://mrddata.usgs.gov/geology/state/state.php?state=NM>> (1997).
- 12 Austin, G. S. *Geology and mineral deposits of Ochoan rocks in Delaware Basin and adjacent areas*. Vol. Circular 159 (New Mexico Bureau of Mines and Mineral Resources, 1978).
- 13 Powers, D. W., Lambert, S. J., Shaffer, S.-E., Hill, L. R. & Weart, W. D. Geological Characterization Report, Waste Isolation Pilot Plant (WIPP) Site, Southeastern New Mexico. 726 (Sandia Laboratories, Albuquerque, NM, 1978).
- 14 Goodbar, J. R. & Goodbar, A. in *US Geological Survey Karst Interest Group* (National Cave and Karst Research Institute, Carlsbad, NM, 2014).
- 15 Scholle, P. A. *Geologic Map of New Mexico*. (2003).

- 16 Decker, D. D., Jorgensen, G. L. & Palmer, R. in *Southwest Geophysical Cave and Karst Database* (ed LLC Southwest Geophysical Consulting) (Albuquerque, NM, 2025).
- 17 Whitehead, W., Bandy, M. & Decker, D. Protocol for Using UAV Photography for Rapid Assessment of Karst Features in Southeast New Mexico. *Proceedings of the 2022 Cave and Karst Management Symposium* (2022).
- 18 Hill, C. A. *Geology of the Delaware Basin, Guadalupe, Apache and Glass Mountains, New Mexico and West Texas*. Vol. 96-39 (Permian Basin Section - SEPM, 1996).

**8.0 GLOSSARY OF TERMS**

AGI	Advanced Geosciences Inc.
BLM-CFO	Bureau of Land Management - Carlsbad Field Office
brecciated	Fractured rock caused by faulting or collapse.
caprock-collapse sinkhole	Collapse of roof-spanning rock into a cave or void.
cave	Natural opening at the surface large enough for a person to enter.
cover-collapse sinkhole	Collapse of roof-spanning soil or clay ground cover into a subsurface void.
ERI	Electrical Resistivity Imaging
GPS	Global Positioning System
grike	A solutionally enlarged, vertical, or sub-vertical joint or fracture.
(H)	High confidence modifier for a PKF. This is typically reserved for a feature that is definitely karst but has not been confirmed in the field.
HKOZ	High Karst Occurrence Zone
karst	A landscape containing solutional features such as caves, sinkholes, swallets, and springs.
(L)	Low confidence modifier for a PKF. This is typically a feature that cannot be ruled out as karst but is most likely NOT karst related. This modifier may also be used for pseudokarst features.
(M)	Medium confidence modifier for PKF. This is an ambiguous feature that can't be positively identified as karst without a field visit (e.g., burrows, abandoned unlined wells, solution tubes, pseudokarst).
MKOZ	Medium Karst Occurrence Zone
NCRC	National Cave Rescue Commission
NKF	Non-karst feature. Used for features originally identified as PKF that have been subsequently identified in the field as non-karst related. This term may also be used for pseudokarst features.
NMSLO	New Mexico State Land Office
Ohm-m	Ohm-meter, a unit of measurement for resistivity. Sometimes abbreviated $\Omega$ -m.
paleokarst	Previously formed karst features that have been filled in by erosion and/or deposition of minerals.
Pat	Permian Artesia Group
Pc	Permian Capitan Formation
Pcs	Permian Castile Formation
Pdl	Permian Dewey Lake Formation
PKF	Possible karst feature. This term is reserved for features identified in satellite or aerial imagery that have NOT been visited in the

field. Further modifiers include (H) for high confidence, (M) for medium confidence, and (L) for low confidence. These confidence levels are based on field experience.

PLSS	Public Land Survey System
Pqg	Permian Queen/Greyburg Formation
Pru	Permian Rustler Formation
pseudokarst	Karst-like features (sinkholes, conduits, voids etc.) that are not formed by dissolution. These types of features include soil piping, lava tubes, and some cover-collapse and suffosion sinkholes.
Psl	Permian Salado Formation
Psr	Permian Seven Rivers Formation
Pt	Permian Tansill Formation
Py	Permian Yates Formation
Qal	Quaternary alluvium
Qe	Quaternary eolian deposits
Qp	Quaternary piedmont deposits
Qpl	Quaternary playa lake deposits
RKF	Recognized karst feature. This term is reserved for karst features that have been physically verified in the field.
SPAR	Small Party Assisted Rescue
sUAS	Small, uncrewed aerial system
suffosion sinkhole	Raveling of soil into a pre-existing void or fracture.
swallet	A natural opening in the surface, too small for a person, that drains water to an aquifer. Some are "open," meaning a void can be seen below; some are "closed," meaning they are full of sediment.
SWG	Southwest Geophysical Consulting, LLC
UTM	Universal Transverse Mercator (projected coordinates)
(V)	Field verified modifier for a RKF. This indicates that the feature has been visited by a qualified karst professional in the field and fully identified
WGS	World Geodetic System (geographic coordinates)

## 9.0 ATTESTATION

### David D. Decker, PhD, PG, CPG

Chief Executive Officer, Principal Geologist

Southwest Geophysical Consulting, LLC

5117 Fairfax Dr. NW

Albuquerque, NM 87114

[dave@swgeophys.com](mailto:dave@swgeophys.com)

(505) 585-2550

## CERTIFICATE OF AUTHOR

I, David D. Decker, a Licensed Professional Geologist and a Certified Professional Geologist, do certify that:

- I am currently employed as a consulting geologist in the specialty of caves and karst with an office address of 5117 Fairfax Dr. NW, Albuquerque, NM, USA, 87114.
- I graduated with a Master of Science in Applied Physics with a specialization in Sensor Systems from the Naval Post Graduate School in Monterey, California, in 2003, and a Doctor of Philosophy in Earth and Planetary Sciences from the University of New Mexico, Albuquerque, New Mexico, in 2018.
- I am a Licensed Professional Geologist in the State of Texas, USA (PG-15242) and have been since 2021. I am a Certified Professional Geologist through the American Institute of Professional Geologists (CPG-12123) and have been since 2021.
- I have been employed as a geologist continuously since 2016. I was previously employed as a Fire Controlman, Naval Flight Officer, and Aerospace Engineering Duty Officer in the U.S. Navy and operated, maintained, and installed various sensor systems including magnetic, electromagnetic, radar, communications, and acoustic systems in various capacities from 1986 through 2010.
- I have been involved in various aspects of cave and karst studies continuously since 1985, including exploration, mapping, and scientific studies.
- I have read the definition of “qualified karst professional” set out in the ASTM Standard Practice for Preliminary Karst Terrain Assessment for Site Development (ASTM E-1527). I meet the definition of “qualified professional” for the purposes of this standard.
- I am responsible for the content, compilation, and editing of all sections of report number TRCN-003-20260116 entitled, “Environmental Karst Study Report, Devon-Snapping 12 CTB 2, Eddy County, New Mexico.” I or a duly authorized and qualified representative of Southwest Geophysical Consulting, LLC, have personally visited this site and/or reviewed the aerial imagery on the date or dates mentioned in section **2.3 Description of Survey**.

- I have no prior involvement nor monetary interest in the described property or project, save for my fee for conducting this investigation and providing the report.

Dated in Albuquerque, New Mexico, February 27, 2026.



David D. Decker  
PhD, CPG-12123



**APPENDIX D**  
**NMOSE State Well Plugging Report**



# PLUGGING RECORD



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

## I. GENERAL / WELL OWNERSHIP:

State Engineer Well Number: BH-01-22 C-04644

Well owner: Plains All American Pipeline, L.P. Phone No.: 713-646-4100

Mailing address: 333 Clay Street, Suite 1600

City: Houston State: Texas Zip code: 77002

## II. WELL PLUGGING INFORMATION:

- 1) Name of well drilling company that plugged well: Talon/LPE
- 2) New Mexico Well Driller License No.: NM-1800 Expiration Date: 06-2024
- 3) Well plugging activities were supervised by the following well driller(s)/rig supervisor(s): Jarod Michalsky
- 4) Date well plugging began: 09-07-2022 Date well plugging concluded: 09-07-2022
- 5) GPS Well Location: Latitude: 32 deg, 3 min, 40.9 sec  
Longitude: 103 deg, 44 min, 13.9 sec, WGS 84
- 6) Depth of well confirmed at initiation of plugging as: 80 ft below ground level (bgl),  
by the following manner: Grout from bottom to top
- 7) Static water level measured at initiation of plugging: N/A ft bgl
- 8) Date well plugging plan of operations was approved by the State Engineer: 06-13-2022
- 9) Were all plugging activities consistent with an approved plugging plan? Yes If not, please describe differences between the approved plugging plan and the well as it was plugged (attach additional pages as needed):

N/A

DSE DTI DEC 8 2022 PM 3:45

2022 DEC -1 PM 9:58

STATE ENGINEERS OFFICE  
SANTA FE, NEW MEXICO

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

For each interval plugged, describe within the following columns:

<u>Depth</u> (ft bgl)	<u>Plugging Material Used</u> (include any additives used)	<u>Volume of Material Placed</u> (gallons)	<u>Theoretical Volume of Borehole/ Casing</u> (gallons)	<u>Placement Method</u> (tremie pipe, other)	<u>Comments</u> ("casing perforated first", "open annular space also plugged", etc.)
	Grout from 80' bgs to 0' bgs	118 gallons		Tremie	

USE DTI DEC 8 2022 PM 3:45

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

**III. SIGNATURE:**

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

Jarod Mark Michalsky

Digitally signed by Jarod Mark Michalsky  
DN: cn=Jarod Mark Michalsky, o=STATE OF CALIFORNIA, ou=STATE ENGINEERS, email=jmichalsky@state.ca.gov, c=US

Signature of Well Driller

11/23/2022

Date

STATE ENGINEERS OF CALIFORNIA  
SANTA FE, NEW MEXICO  
DEC 1 10 53

**APPENDIX E**  
**Laboratory Analytical Reports & Chain of Custody**

**Delineation Sample Analytical Results**  
**1<sup>st</sup> NMOCD Incident # nAPP2432333537**



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

---

December 09, 2024

TRAVIS CASEY  
TERRACON CONSULTANTS  
5827 50TH ST. SUITE 1  
LUBBOCK, TX 79424

RE: SNAPPING 12 CTB 2

Enclosed are the results of analyses for samples received by the laboratory on 12/03/24 14:17.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C24-00112. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/ga/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/ga/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene". The signature is written in a cursive style.

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 01 0.5' (H247347-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	3.64	
Toluene*	<0.050	0.050	12/05/2024	ND	1.98	99.2	2.00	2.05	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.00	100	2.00	1.49	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	5.99	99.9	6.00	1.58	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 99.6 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 108 % 48.2-134

Surrogate: 1-Chlorooctadecane 111 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 01 2.5' (H247347-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	3.64	
Toluene*	<0.050	0.050	12/05/2024	ND	1.98	99.2	2.00	2.05	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.00	100	2.00	1.49	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	5.99	99.9	6.00	1.58	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 98.7 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 02 0.5' (H247347-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	3.64		
Toluene*	<0.050	0.050	12/05/2024	ND	1.98	99.2	2.00	2.05		
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.00	100	2.00	1.49		
Total Xylenes*	<0.150	0.150	12/05/2024	ND	5.99	99.9	6.00	1.58		
Total BTEX	<0.300	0.300	12/05/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 99.9 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00		
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57		
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND						

Surrogate: 1-Chlorooctane 91.7 % 48.2-134

Surrogate: 1-Chlorooctadecane 93.8 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 02 2.5' (H247347-04)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 107 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 03 0.5' (H247347-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 99.9 % 48.2-134

Surrogate: 1-Chlorooctadecane 102 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 03 2.5' (H247347-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

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

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 107 % 48.2-134

Surrogate: 1-Chlorooctadecane 109 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 04 0.5' (H247347-07)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 112 % 48.2-134

Surrogate: 1-Chlorooctadecane 116 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - H - 04 2.5' (H247347-08)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06		
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91		
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09		
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953		
Total BTEX	<0.300	0.300	12/05/2024	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	12/04/2024	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00		
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57		
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND						

Surrogate: 1-Chlorooctane 105 % 48.2-134

Surrogate: 1-Chlorooctadecane 106 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - V - 01 2.5' (H247347-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	1810	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	215	107	200	2.00	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	200	100	200	1.57	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 104 % 48.2-134

Surrogate: 1-Chlorooctadecane 105 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - V - 01 7.5' (H247347-10)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	928	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	225	112	200	0.536	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	204	102	200	2.13	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 92.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 87.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - V - 02 2.5' (H247347-11)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	2840	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	225	112	200	0.536	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	204	102	200	2.13	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 93.5 % 48.2-134

Surrogate: 1-Chlorooctadecane 89.7 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

TERRACON CONSULTANTS  
 TRAVIS CASEY  
 5827 50TH ST. SUITE 1  
 LUBBOCK TX, 79424  
 Fax To:

Received:	12/03/2024	Sampling Date:	12/02/2024
Reported:	12/09/2024	Sampling Type:	Soil
Project Name:	SNAPPING 12 CTB 2	Sampling Condition:	Cool & Intact
Project Number:	KH247057	Sample Received By:	Shalyn Rodriguez
Project Location:	DEVON - EDDY CO NM		

**Sample ID: DS - V - 02 7.5' (H247347-12)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	12/05/2024	ND	2.02	101	2.00	2.06	
Toluene*	<0.050	0.050	12/05/2024	ND	2.11	105	2.00	1.91	
Ethylbenzene*	<0.050	0.050	12/05/2024	ND	2.08	104	2.00	1.09	
Total Xylenes*	<0.150	0.150	12/05/2024	ND	6.57	109	6.00	0.953	
Total BTEX	<0.300	0.300	12/05/2024	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KV					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	3680	16.0	12/04/2024	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	12/04/2024	ND	225	112	200	0.536	
DRO >C10-C28*	<10.0	10.0	12/04/2024	ND	204	102	200	2.13	
EXT DRO >C28-C36	<10.0	10.0	12/04/2024	ND					

Surrogate: 1-Chlorooctane 94.4 % 48.2-134

Surrogate: 1-Chlorooctadecane 90.0 % 49.1-148

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- S-05 The surrogate recovery is outside of lab established statistical control limits but still within method limits. Data is not adversely affected.
- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

\*=Accredited Analyte

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising, whether based in contract or tort, shall be limited to the amount paid by client for analyses. All claims, including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within thirty (30) days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including, without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of the services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise. Results relate only to the samples identified above. This report shall not be reproduced except in full with written approval of Cardinal Laboratories.

*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon		P.O. #: _____		BILL TO:		ANALYSIS REQUEST	
Project Manager: Travis Casey		Company: Devon Energy		Address: 205 E. Bender Road			
Address: 4526 W. Pierce Street		City: Hobbs		State: NM, 88240			
City: Carlsbad		Phone #: _____		Fax #: _____			
Phone #: 915-262-9701		Project Owner: Devon Energy		Project Location: Snapping 12 CTB 2			
Project #: KH247057		Sampler Name: Gus Sanchez		Project Location: Snapping 12 CTB 2			
Project Name: Snapping 12 CTB 2		FOR LAB USE ONLY					

Lab I.D.	Sample I.D.	Depth		(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX						DATE	TIME	Chloride (EPA Method 4500)	TPH Extended 8015	BTEX (EPA Method 8021B)	Hold	
		Start	End			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :							ACID/BASE:
H847347	1	0.5	0.5	G									12/2/2024	14:58				
	2	2.5	2.5	G									12/2/2024	15:04				
	3	0.5	0.5	G									12/2/2024	15:10				
	4	2.5	2.5	G									12/2/2024	15:23				
	5	0.5	0.5	G									12/2/2024	15:32				
	6	2.5	2.5	G									12/2/2024	15:39				
	7	0.5	0.5	G									12/2/2024	15:48				
	8	2.5	2.5	G									12/2/2024	15:55				
	9	2.5	2.5	G									12/2/2024	13:04				
	10	7.5	7.5	G									12/2/2024	13:22				
	11	2.5	2.5	G									12/2/2024	13:37				
	12	7.5	7.5	G									12/2/2024	13:51				

**PLEASE NOTE:** Turnaround time for any chain custody samples is based on the amount paid by the client for the analysis. All chains including those for emergency and any other critical analyses will be deemed critical unless noted otherwise by client. An individual's or organization's failure to follow the instructions on this form may result in the performance of services rendered by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: <i>AK AL</i>	Date: 12-3-24	Received By: <i>Stodiegrue</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Add'l Phone #:
Time: 1417	Date: _____	Received By: _____	All Results are emailed. Please provide Email address: joeeph.guestner@terracon.com; travis.casey@terracon.com; chuck.smith@terracon.com; bechysue.miller@terracon.com; gus.sanchez@terracon.com; austin.worley@terracon.com
Observed Temp. °C: -1.9	Corrected Temp. °C: -2.5	Sample Condition: Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Thermometer <input checked="" type="checkbox"/> -0.0: <input type="checkbox"/> Correction Factor: <input type="checkbox"/> <input type="checkbox"/>
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Checked By: <i>SK</i>	Bacteria (only) Sample Condition: Cool <input type="checkbox"/> Observed Temp. °C: _____ Yeast <input type="checkbox"/> Corrected Temp. °C: _____ No <input type="checkbox"/>	

FORM 008 R 3.2 10/07/21

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

**Delineation Sample Analytical Results**  
**3<sup>rd</sup> NMOCD Incident # nAPP2508758656**



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 4/15/2025 4:53:29 PM Revision 1

## JOB DESCRIPTION

Snapping 12 CTB 2  
 Eddy County

## JOB NUMBER

820-18382-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



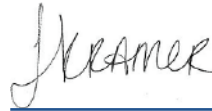
# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
4/15/2025 4:53:29 PM  
Revision 1

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Laboratory Job ID: 820-18382-1  
SDG: Eddy County

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	7
Surrogate Summary . . . . .	18
QC Sample Results . . . . .	20
QC Association Summary . . . . .	26
Lab Chronicle . . . . .	30
Certification Summary . . . . .	34
Method Summary . . . . .	35
Sample Summary . . . . .	36
Chain of Custody . . . . .	37
Receipt Checklists . . . . .	40

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

## Qualifiers

## GC VOA

Qualifier	Qualifier Description
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

## GC Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
U	Analyte was not detected at or above the SDL.
X	Surrogate recovery exceeds control limits

## HPLC/IC

Qualifier	Qualifier Description
N1	MS, MSD: Spike recovery exceeds upper or lower control limits.
U	Analyte was not detected at or above the SDL.

## 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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-18382-1

**Job ID: 820-18382-1**

**Eurofins Lubbock**

### Job Narrative 820-18382-1

#### REVISION

The report being provided is a revision of the original report sent on 4/15/2025. The report (revision 1) is being revised due to Per client email, requesting sample ID correction.

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

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

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

#### **Receipt**

The samples were received on 4/9/2025 1:52 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.9°C.

#### **Receipt Exceptions**

Chuck Smith was contacted by phone concerning the Chloride method and he instructed the lab to analyze by method E300 DS-1 (820-18382-1), DS-2 (820-18382-2), DS-3 (820-18382-3), DS-4 (820-18382-4), DS-5 (820-18382-5), DS-6 (820-18382-6), DS-7 (820-18382-7), DS-8 (820-18382-8), DS-9 (820-18382-9), DS-10 (820-18382-10), DS-10 (820-18382-11), DS-11 (820-18382-12) and DS-12 (820-18382-13)

The container label for the following samples did not match the information listed on the Chain-of-Custody (COC): DS-1 (820-18382-1), DS-2 (820-18382-2), DS-3 (820-18382-3), DS-4 (820-18382-4), DS-5 (820-18382-5), DS-6 (820-18382-6), DS-7 (820-18382-7), DS-8 (820-18382-8), DS-9 (820-18382-9), DS-10 (820-18382-10), DS-10 (820-18382-11), DS-11 (820-18382-12) and DS-12 (820-18382-13). The container labels list DS, while the COC lists CS. Chuck Smith was contacted by phone, and the lab was instructed to use the IDs from the containers (DS).

#### **GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-107356 and analytical batch 880-107290 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: DS-2 (820-18382-2). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-107423/2-A) and (LCSD 880-107423/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: The laboratory control sample (LCS) associated with preparation batch 880-107423 and analytical batch 880-107472 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.

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

#### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-107383 and analytical batch 880-107431 were outside control limits for one or more analytes. See QC Sample Results for

Eurofins Lubbock

## Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-18382-1

### Job ID: 820-18382-1 (Continued)

**Eurofins Lubbock**

detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-1**

**Lab Sample ID: 820-18382-1**

Date Collected: 04/08/25 16:40

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00198	0.00138	mg/Kg		04/10/25 11:40	04/11/25 02:38	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		04/10/25 11:40	04/11/25 02:38	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		04/10/25 11:40	04/11/25 02:38	1
m,p-Xylenes	<0.00226	U	0.00396	0.00226	mg/Kg		04/10/25 11:40	04/11/25 02:38	1
<b>o-Xylene</b>	<b>0.00634</b>		0.00198	0.00157	mg/Kg		04/10/25 11:40	04/11/25 02:38	1
<b>Xylenes, Total</b>	<b>0.00634</b>		0.00396	0.00226	mg/Kg		04/10/25 11:40	04/11/25 02:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	04/10/25 11:40	04/11/25 02:38	1
1,4-Difluorobenzene (Surr)	96		70 - 130	04/10/25 11:40	04/11/25 02:38	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Total BTEX</b>	<b>0.00634</b>		0.00396	0.00226	mg/Kg			04/11/25 02:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	50.0	15.1	mg/Kg			04/11/25 23:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		04/11/25 08:04	04/11/25 23:26	1
Diesel Range Organics (Over C10-C28)	<15.1	U *	50.0	15.1	mg/Kg		04/11/25 08:04	04/11/25 23:26	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		04/11/25 08:04	04/11/25 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	80		70 - 130	04/11/25 08:04	04/11/25 23:26	1
o-Terphenyl (Surr)	78		70 - 130	04/11/25 08:04	04/11/25 23:26	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Chloride</b>	<b>479</b>		9.92	0.392	mg/Kg			04/11/25 09:39	1

**Client Sample ID: DS-2**

**Lab Sample ID: 820-18382-2**

Date Collected: 04/08/25 16:45

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00199	0.00138	mg/Kg		04/10/25 11:40	04/11/25 02:58	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		04/10/25 11:40	04/11/25 02:58	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		04/10/25 11:40	04/11/25 02:58	1
m,p-Xylenes	<0.00227	U	0.00398	0.00227	mg/Kg		04/10/25 11:40	04/11/25 02:58	1
<b>o-Xylene</b>	<b>0.00218</b>		0.00199	0.00157	mg/Kg		04/10/25 11:40	04/11/25 02:58	1
<b>Xylenes, Total</b>	<b>&lt;0.00227</b>	U	0.00398	0.00227	mg/Kg		04/10/25 11:40	04/11/25 02:58	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	165	X	70 - 130	04/10/25 11:40	04/11/25 02:58	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-18382-1  
SDG: Eddy County

Client Sample ID: DS-2

Lab Sample ID: 820-18382-2

Date Collected: 04/08/25 16:45

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	114		70 - 130	04/10/25 11:40	04/11/25 02:58	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			04/11/25 02:58	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.2	U	50.3	15.2	mg/Kg			04/11/25 23:43	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	<14.6	U	50.3	14.6	mg/Kg		04/11/25 08:04	04/11/25 23:43	1
Diesel Range Organics (Over C10-C28)	<15.2	U *	50.3	15.2	mg/Kg		04/11/25 08:04	04/11/25 23:43	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.3	15.2	mg/Kg		04/11/25 08:04	04/11/25 23:43	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane (Surr)	86		70 - 130	04/11/25 08:04	04/11/25 23:43	1			
o-Terphenyl (Surr)	81		70 - 130	04/11/25 08:04	04/11/25 23:43	1			

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	134		9.98	0.394	mg/Kg			04/11/25 09:56	1

Client Sample ID: DS-3

Lab Sample ID: 820-18382-3

Date Collected: 04/08/25 16:48

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 04:48	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	88		70 - 130	04/10/25 11:40	04/11/25 04:48	1			
1,4-Difluorobenzene (Surr)	105		70 - 130	04/10/25 11:40	04/11/25 04:48	1			

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/11/25 04:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			04/11/25 23:59	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

## Client Sample ID: DS-3

Lab Sample ID: 820-18382-3

Date Collected: 04/08/25 16:48

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

## 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	<14.5	U	49.9	14.5	mg/Kg		04/11/25 08:04	04/11/25 23:59	1
Diesel Range Organics (Over C10-C28)	<15.1	U *	49.9	15.1	mg/Kg		04/11/25 08:04	04/11/25 23:59	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 08:04	04/11/25 23:59	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	82		70 - 130				04/11/25 08:04	04/11/25 23:59	1
o-Terphenyl (Surr)	79		70 - 130				04/11/25 08:04	04/11/25 23:59	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2660		49.8	1.97	mg/Kg			04/11/25 10:02	5

## Client Sample ID: DS-4

Lab Sample ID: 820-18382-4

Date Collected: 04/08/25 16:54

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 05:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130				04/10/25 11:40	04/11/25 05:08	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/10/25 11:40	04/11/25 05:08	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/11/25 05:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.2	U	50.1	15.2	mg/Kg			04/12/25 00:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	50.1	14.6	mg/Kg		04/11/25 08:04	04/12/25 00:15	1
Diesel Range Organics (Over C10-C28)	<15.2	U *	50.1	15.2	mg/Kg		04/11/25 08:04	04/12/25 00:15	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.1	15.2	mg/Kg		04/11/25 08:04	04/12/25 00:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	94		70 - 130				04/11/25 08:04	04/12/25 00:15	1
o-Terphenyl (Surr)	83		70 - 130				04/11/25 08:04	04/12/25 00:15	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-4**

**Lab Sample ID: 820-18382-4**

Date Collected: 04/08/25 16:54  
 Date Received: 04/09/25 13:52  
 Sample Depth: 0.5 - 1.0

Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	960		9.94	0.393	mg/Kg			04/11/25 10:08	1

**Client Sample ID: DS-5**

**Lab Sample ID: 820-18382-5**

Date Collected: 04/08/25 17:00  
 Date Received: 04/09/25 13:52  
 Sample Depth: 0.5 - 1.0

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/11/25 05:29	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/11/25 05:29	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/11/25 05:29	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 05:29	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 11:40	04/11/25 05:29	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 05:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/10/25 11:40	04/11/25 05:29	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/10/25 11:40	04/11/25 05:29	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/11/25 05:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			04/12/25 00:31	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	<14.5	U	49.9	14.5	mg/Kg		04/11/25 08:04	04/12/25 00:31	1
Diesel Range Organics (Over C10-C28)	<15.1	U *	49.9	15.1	mg/Kg		04/11/25 08:04	04/12/25 00:31	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 08:04	04/12/25 00:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	04/11/25 08:04	04/12/25 00:31	1
o-Terphenyl (Surr)	77		70 - 130	04/11/25 08:04	04/12/25 00:31	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4750		49.8	1.97	mg/Kg			04/11/25 10:13	5

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-18382-1  
SDG: Eddy County

Client Sample ID: DS-6

Lab Sample ID: 820-18382-6

Date Collected: 04/08/25 17:06

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00202	0.00140	mg/Kg		04/10/25 11:40	04/11/25 05:49	1
Toluene	<0.00202	U	0.00202	0.00202	mg/Kg		04/10/25 11:40	04/11/25 05:49	1
Ethylbenzene	<0.00110	U	0.00202	0.00110	mg/Kg		04/10/25 11:40	04/11/25 05:49	1
m,p-Xylenes	<0.00230	U	0.00403	0.00230	mg/Kg		04/10/25 11:40	04/11/25 05:49	1
o-Xylene	<0.00160	U	0.00202	0.00160	mg/Kg		04/10/25 11:40	04/11/25 05:49	1
Xylenes, Total	<0.00230	U	0.00403	0.00230	mg/Kg		04/10/25 11:40	04/11/25 05:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	04/10/25 11:40	04/11/25 05:49	1
1,4-Difluorobenzene (Surr)	114		70 - 130	04/10/25 11:40	04/11/25 05:49	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00403	0.00230	mg/Kg			04/11/25 05:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			04/12/25 00:47	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	<14.4	U	49.7	14.4	mg/Kg		04/11/25 08:04	04/12/25 00:47	1
Diesel Range Organics (Over C10-C28)	<15.0	U *	49.7	15.0	mg/Kg		04/11/25 08:04	04/12/25 00:47	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		04/11/25 08:04	04/12/25 00:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	90		70 - 130	04/11/25 08:04	04/12/25 00:47	1
o-Terphenyl (Surr)	79		70 - 130	04/11/25 08:04	04/12/25 00:47	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1300		9.92	0.392	mg/Kg			04/11/25 10:31	1

Client Sample ID: DS-7

Lab Sample ID: 820-18382-7

Date Collected: 04/08/25 17:12

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		04/10/25 11:40	04/11/25 06:10	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		04/10/25 11:40	04/11/25 06:10	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		04/10/25 11:40	04/11/25 06:10	1
m,p-Xylenes	<0.00228	U	0.00398	0.00228	mg/Kg		04/10/25 11:40	04/11/25 06:10	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		04/10/25 11:40	04/11/25 06:10	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		04/10/25 11:40	04/11/25 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	04/10/25 11:40	04/11/25 06:10	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-7**

**Lab Sample ID: 820-18382-7**

Date Collected: 04/08/25 17:12

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	98		70 - 130	04/10/25 11:40	04/11/25 06:10	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			04/11/25 06:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.2	U	50.2	15.2	mg/Kg			04/12/25 01:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	50.2	14.6	mg/Kg		04/11/25 08:04	04/12/25 01:03	1
Diesel Range Organics (Over C10-C28)	<15.2	U *	50.2	15.2	mg/Kg		04/11/25 08:04	04/12/25 01:03	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.2	15.2	mg/Kg		04/11/25 08:04	04/12/25 01:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130	04/11/25 08:04	04/12/25 01:03	1
o-Terphenyl (Surr)	82		70 - 130	04/11/25 08:04	04/12/25 01:03	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17900		200	7.92	mg/Kg			04/11/25 10:37	20

**Client Sample ID: DS-8**

**Lab Sample ID: 820-18382-8**

Date Collected: 04/08/25 17:18

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg		04/10/25 11:40	04/11/25 06:30	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		04/10/25 11:40	04/11/25 06:30	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		04/10/25 11:40	04/11/25 06:30	1
m,p-Xylenes	<0.00230	U	0.00402	0.00230	mg/Kg		04/10/25 11:40	04/11/25 06:30	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		04/10/25 11:40	04/11/25 06:30	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		04/10/25 11:40	04/11/25 06:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	120		70 - 130	04/10/25 11:40	04/11/25 06:30	1
1,4-Difluorobenzene (Surr)	109		70 - 130	04/10/25 11:40	04/11/25 06:30	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00230	U	0.00402	0.00230	mg/Kg			04/11/25 06:30	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			04/12/25 03:13	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

## Client Sample ID: DS-8

Lab Sample ID: 820-18382-8

Date Collected: 04/08/25 17:18

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

## 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	<14.5	U	49.9	14.5	mg/Kg		04/11/25 12:26	04/12/25 03:13	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 12:26	04/12/25 03:13	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 12:26	04/12/25 03:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130				04/11/25 12:26	04/12/25 03:13	1
o-Terphenyl (Surr)	88		70 - 130				04/11/25 12:26	04/12/25 03:13	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1820		49.7	1.96	mg/Kg			04/11/25 10:43	5

## Client Sample ID: DS-9

Lab Sample ID: 820-18382-9

Date Collected: 04/08/25 17:25

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 1.5 - 2.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 06:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	119		70 - 130				04/10/25 11:40	04/11/25 06:50	1
1,4-Difluorobenzene (Surr)	103		70 - 130				04/10/25 11:40	04/11/25 06:50	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/11/25 06:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			04/12/25 04:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		04/11/25 12:26	04/12/25 04:01	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		04/11/25 12:26	04/12/25 04:01	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		04/11/25 12:26	04/12/25 04:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	91		70 - 130				04/11/25 12:26	04/12/25 04:01	1
o-Terphenyl (Surr)	88		70 - 130				04/11/25 12:26	04/12/25 04:01	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-9**

**Lab Sample ID: 820-18382-9**

Date Collected: 04/08/25 17:25  
 Date Received: 04/09/25 13:52  
 Sample Depth: 1.5 - 2.0

Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5940		99.2	3.92	mg/Kg			04/11/25 10:48	10

**Client Sample ID: DS-10**

**Lab Sample ID: 820-18382-10**

Date Collected: 04/08/25 17:40  
 Date Received: 04/09/25 13:52  
 Sample Depth: 0.5 - 1.0

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00199	0.00139	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
m,p-Xylenes	<0.00228	U	0.00398	0.00228	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
o-Xylene	<0.00158	U	0.00199	0.00158	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
Xylenes, Total	<0.00228	U	0.00398	0.00228	mg/Kg		04/10/25 11:40	04/11/25 07:11	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	114		70 - 130				04/10/25 11:40	04/11/25 07:11	1
1,4-Difluorobenzene (Surr)	101		70 - 130				04/10/25 11:40	04/11/25 07:11	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00398	0.00228	mg/Kg			04/11/25 07:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			04/12/25 04:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		04/11/25 12:26	04/12/25 04:17	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 12:26	04/12/25 04:17	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		04/11/25 12:26	04/12/25 04:17	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane (Surr)	89		70 - 130				04/11/25 12:26	04/12/25 04:17	1
o-Terphenyl (Surr)	88		70 - 130				04/11/25 12:26	04/12/25 04:17	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2750		50.2	1.98	mg/Kg			04/11/25 10:54	5

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-18382-1  
SDG: Eddy County

Client Sample ID: DS-10

Lab Sample ID: 820-18382-11

Date Collected: 04/08/25 17:52

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 4..5 - 5.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00138	U	0.00198	0.00138	mg/Kg		04/10/25 11:40	04/11/25 07:31	1
Toluene	<0.00198	U	0.00198	0.00198	mg/Kg		04/10/25 11:40	04/11/25 07:31	1
Ethylbenzene	<0.00108	U	0.00198	0.00108	mg/Kg		04/10/25 11:40	04/11/25 07:31	1
m,p-Xylenes	<0.00226	U	0.00396	0.00226	mg/Kg		04/10/25 11:40	04/11/25 07:31	1
o-Xylene	<0.00157	U	0.00198	0.00157	mg/Kg		04/10/25 11:40	04/11/25 07:31	1
Xylenes, Total	<0.00226	U	0.00396	0.00226	mg/Kg		04/10/25 11:40	04/11/25 07:31	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	04/10/25 11:40	04/11/25 07:31	1
1,4-Difluorobenzene (Surr)	100		70 - 130	04/10/25 11:40	04/11/25 07:31	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00226	U	0.00396	0.00226	mg/Kg			04/11/25 07:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.6	15.0	mg/Kg			04/12/25 04:34	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U	49.6	14.4	mg/Kg		04/11/25 12:26	04/12/25 04:34	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg		04/11/25 12:26	04/12/25 04:34	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg		04/11/25 12:26	04/12/25 04:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	101		70 - 130	04/11/25 12:26	04/12/25 04:34	1
o-Terphenyl (Surr)	98		70 - 130	04/11/25 12:26	04/12/25 04:34	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	942		9.96	0.393	mg/Kg			04/11/25 11:00	1

Client Sample ID: DS-11

Lab Sample ID: 820-18382-12

Date Collected: 04/08/25 17:29

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/11/25 07:52	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/11/25 07:52	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/11/25 07:52	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 07:52	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 11:40	04/11/25 07:52	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 11:40	04/11/25 07:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130	04/10/25 11:40	04/11/25 07:52	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

Client Sample ID: DS-11

Lab Sample ID: 820-18382-12

Date Collected: 04/08/25 17:29

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	97		70 - 130	04/10/25 11:40	04/11/25 07:52	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/11/25 07:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.6	15.0	mg/Kg			04/12/25 04:50	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	<14.4	U	49.6	14.4	mg/Kg		04/11/25 12:26	04/12/25 04:50	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg		04/11/25 12:26	04/12/25 04:50	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg		04/11/25 12:26	04/12/25 04:50	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane (Surr)	88		70 - 130	04/11/25 12:26	04/12/25 04:50	1			
o-Terphenyl (Surr)	88		70 - 130	04/11/25 12:26	04/12/25 04:50	1			

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1270		9.92	0.392	mg/Kg			04/11/25 11:17	1

Client Sample ID: DS-12

Lab Sample ID: 820-18382-13

Date Collected: 04/08/25 18:10

Matrix: Solid

Date Received: 04/09/25 13:52

Sample Depth: 0.5 - 1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
m,p-Xylenes	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
o-Xylene	<0.00159	U	0.00200	0.00159	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
Xylenes, Total	<0.00229	U	0.00401	0.00229	mg/Kg		04/10/25 08:46	04/10/25 19:36	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
4-Bromofluorobenzene (Surr)	103		70 - 130	04/10/25 08:46	04/10/25 19:36	1			
1,4-Difluorobenzene (Surr)	102		70 - 130	04/10/25 08:46	04/10/25 19:36	1			

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00401	0.00229	mg/Kg			04/10/25 19:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			04/12/25 05:06	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-12**  
**Date Collected: 04/08/25 18:10**  
**Date Received: 04/09/25 13:52**  
**Sample Depth: 0.5 - 1.0**

**Lab Sample ID: 820-18382-13**  
**Matrix: Solid**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg	-	04/11/25 12:26	04/12/25 05:06	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg	-	04/11/25 12:26	04/12/25 05:06	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg	-	04/11/25 12:26	04/12/25 05:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	89		70 - 130				04/11/25 12:26	04/12/25 05:06	1
o-Terphenyl (Surr)	87		70 - 130				04/11/25 12:26	04/12/25 05:06	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3470		101	3.98	mg/Kg	-		04/11/25 11:23	10

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-18382-1  
SDG: Eddy County

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-18382-1	DS-1	122	96
820-18382-2	DS-2	165 X	114
820-18382-3	DS-3	88	105
820-18382-4	DS-4	106	101
820-18382-5	DS-5	102	100
820-18382-6	DS-6	113	114
820-18382-7	DS-7	104	98
820-18382-8	DS-8	120	109
820-18382-9	DS-9	119	103
820-18382-10	DS-10	114	101
820-18382-11	DS-10	113	100
820-18382-12	DS-11	124	97
820-18382-13	DS-12	103	102
LCS 880-107296/1-A	Lab Control Sample	103	104
LCS 880-107356/1-A	Lab Control Sample	93	94
LCSD 880-107296/2-A	Lab Control Sample Dup	100	101
LCSD 880-107356/2-A	Lab Control Sample Dup	98	94
MB 880-107296/5-A	Method Blank	102	94
MB 880-107302/5-A	Method Blank	227 X	130
MB 880-107356/5-A	Method Blank	211 X	132 X

## 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	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
820-18382-1	DS-1	80	78
820-18382-2	DS-2	86	81
820-18382-3	DS-3	82	79
820-18382-4	DS-4	94	83
820-18382-5	DS-5	81	77
820-18382-6	DS-6	90	79
820-18382-7	DS-7	85	82
820-18382-8	DS-8	92	88
820-18382-8 MS	DS-8	97	86
820-18382-8 MSD	DS-8	94	84
820-18382-9	DS-9	91	88
820-18382-10	DS-10	89	88
820-18382-11	DS-10	101	98
820-18382-12	DS-11	88	88
820-18382-13	DS-12	89	87
LCS 880-107423/2-A	Lab Control Sample	132 X	147 X
LCS 880-107466/2-A	Lab Control Sample	110	122
LCSD 880-107423/3-A	Lab Control Sample Dup	148 X	164 X
LCSD 880-107466/3-A	Lab Control Sample Dup	115	128

Eurofins Lubbock

### Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

**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)
MB 880-107423/1-A	Method Blank	94	99
MB 880-107466/1-A	Method Blank	102	105

**Surrogate Legend**

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

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

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

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

Lab Sample ID: MB 880-107296/5-A  
 Matrix: Solid  
 Analysis Batch: 107288

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 107296

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 08:46	04/10/25 11:31	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 08:46	04/10/25 11:31	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 08:46	04/10/25 11:31	1
m,p-Xylenes	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 08:46	04/10/25 11:31	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		04/10/25 08:46	04/10/25 11:31	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 08:46	04/10/25 11:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	04/10/25 08:46	04/10/25 11:31	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/10/25 08:46	04/10/25 11:31	1

Lab Sample ID: LCS 880-107296/1-A  
 Matrix: Solid  
 Analysis Batch: 107288

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 107296

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09118		mg/Kg		91	70 - 130
Toluene	0.100	0.08471		mg/Kg		85	70 - 130
Ethylbenzene	0.100	0.08869		mg/Kg		89	70 - 130
m,p-Xylenes	0.200	0.1797		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09144		mg/Kg		91	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-107296/2-A  
 Matrix: Solid  
 Analysis Batch: 107288

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 107296

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09336		mg/Kg		93	70 - 130	2	35
Toluene	0.100	0.08655		mg/Kg		87	70 - 130	2	35
Ethylbenzene	0.100	0.09117		mg/Kg		91	70 - 130	3	35
m,p-Xylenes	0.200	0.1845		mg/Kg		92	70 - 130	3	35
o-Xylene	0.100	0.09331		mg/Kg		93	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-107302/5-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 107302

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 08:51	04/10/25 11:50	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 08:51	04/10/25 11:50	1

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

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

Lab Sample ID: MB 880-107302/5-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 107302

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 08:51	04/10/25 11:50	1
m,p-Xylenes	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 08:51	04/10/25 11:50	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		04/10/25 08:51	04/10/25 11:50	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 08:51	04/10/25 11:50	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	227	X	70 - 130	04/10/25 08:51	04/10/25 11:50	1
1,4-Difluorobenzene (Surr)	130		70 - 130	04/10/25 08:51	04/10/25 11:50	1

Lab Sample ID: MB 880-107356/5-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 107356

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg		04/10/25 11:40	04/10/25 23:26	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		04/10/25 11:40	04/10/25 23:26	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		04/10/25 11:40	04/10/25 23:26	1
m,p-Xylenes	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 11:40	04/10/25 23:26	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		04/10/25 11:40	04/10/25 23:26	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		04/10/25 11:40	04/10/25 23:26	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	211	X	70 - 130	04/10/25 11:40	04/10/25 23:26	1
1,4-Difluorobenzene (Surr)	132	X	70 - 130	04/10/25 11:40	04/10/25 23:26	1

Lab Sample ID: LCS 880-107356/1-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 107356

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Toluene	0.100	0.09418		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.1106		mg/Kg		111	70 - 130
m,p-Xylenes	0.200	0.2003		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09675		mg/Kg		97	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: LCSD 880-107356/2-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 107356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Toluene	0.100	0.09511		mg/Kg		95	70 - 130	1	35
Ethylbenzene	0.100	0.09926		mg/Kg		99	70 - 130	11	35

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

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

Lab Sample ID: LCSD 880-107356/2-A  
 Matrix: Solid  
 Analysis Batch: 107290

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 107356

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
m,p-Xylenes	0.200	0.2061		mg/Kg		103	70 - 130	3	35
o-Xylene	0.100	0.09581		mg/Kg		96	70 - 130	1	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	98		70 - 130						
1,4-Difluorobenzene (Surr)	94		70 - 130						

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

Lab Sample ID: MB 880-107423/1-A  
 Matrix: Solid  
 Analysis Batch: 107472

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 107423

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		04/11/25 08:04	04/11/25 10:08	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		04/11/25 08:04	04/11/25 10:08	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		04/11/25 08:04	04/11/25 10:08	1
Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac			
1-Chlorooctane (Surr)	94		70 - 130	04/11/25 08:04	04/11/25 10:08	1			
o-Terphenyl (Surr)	99		70 - 130	04/11/25 08:04	04/11/25 10:08	1			

Lab Sample ID: LCS 880-107423/2-A  
 Matrix: Solid  
 Analysis Batch: 107472

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 107423

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1097		mg/Kg		110	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	1245		mg/Kg		125	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane (Surr)	132	X	70 - 130						
o-Terphenyl (Surr)	147	X	70 - 130						

Lab Sample ID: LCSD 880-107423/3-A  
 Matrix: Solid  
 Analysis Batch: 107472

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 107423

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1201		mg/Kg		120	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	1000	1397	*	mg/Kg		140	70 - 130	11	20

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

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

**Lab Sample ID: LCSD 880-107423/3-A**  
**Matrix: Solid**  
**Analysis Batch: 107472**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 107423**

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	148	X	70 - 130
o-Terphenyl (Surr)	164	X	70 - 130

**Lab Sample ID: MB 880-107466/1-A**  
**Matrix: Solid**  
**Analysis Batch: 107472**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 107466**

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.0	14.5	mg/Kg		04/11/25 12:25	04/12/25 02:25	1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg		04/11/25 12:25	04/12/25 02:25	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		04/11/25 12:25	04/12/25 02:25	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	102		70 - 130	04/11/25 12:25	04/12/25 02:25	1
o-Terphenyl (Surr)	105		70 - 130	04/11/25 12:25	04/12/25 02:25	1

**Lab Sample ID: LCS 880-107466/2-A**  
**Matrix: Solid**  
**Analysis Batch: 107472**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 107466**

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

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	110		70 - 130
o-Terphenyl (Surr)	122		70 - 130

**Lab Sample ID: LCSD 880-107466/3-A**  
**Matrix: Solid**  
**Analysis Batch: 107472**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 107466**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	928.3		mg/Kg		93	70 - 130	7	20
Diesel Range Organics (Over C10-C28)	1000	1052		mg/Kg		105	70 - 130	4	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	115		70 - 130
o-Terphenyl (Surr)	128		70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

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

Lab Sample ID: 820-18382-8 MS  
 Matrix: Solid  
 Analysis Batch: 107472

Client Sample ID: DS-8  
 Prep Type: Total/NA  
 Prep Batch: 107466

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	1010	739.7		mg/Kg		74	70 - 130	
Diesel Range Organics (Over C10-C28)	<15.1	U	1010	755.3		mg/Kg		75	70 - 130	
Surrogate	MS %Recovery	MS Qualifier	MS Limits							
1-Chlorooctane (Surr)	97		70 - 130							
o-Terphenyl (Surr)	86		70 - 130							

Lab Sample ID: 820-18382-8 MSD  
 Matrix: Solid  
 Analysis Batch: 107472

Client Sample ID: DS-8  
 Prep Type: Total/NA  
 Prep Batch: 107466

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	1010	716.0		mg/Kg		71	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<15.1	U	1010	735.8		mg/Kg		73	70 - 130	3	20
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
1-Chlorooctane (Surr)	94		70 - 130								
o-Terphenyl (Surr)	84		70 - 130								

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-107383/1-A  
 Matrix: Solid  
 Analysis Batch: 107431

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.395	U	10.0	0.395	mg/Kg			04/11/25 09:22	1

Lab Sample ID: LCS 880-107383/2-A  
 Matrix: Solid  
 Analysis Batch: 107431

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	231.0		mg/Kg		92	90 - 110

Lab Sample ID: LCSD 880-107383/3-A  
 Matrix: Solid  
 Analysis Batch: 107431

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	232.3		mg/Kg		93	90 - 110	1	20

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

#### Method: 300.0 - Anions, Ion Chromatography (Continued)

**Lab Sample ID: 820-18382-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 107431**

**Client Sample ID: DS-1**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	479		248	607.3	N1	mg/Kg		52	90 - 110

**Lab Sample ID: 820-18382-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 107431**

**Client Sample ID: DS-1**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	479		248	607.3	N1	mg/Kg		52	90 - 110	0	20

**Lab Sample ID: 820-18382-11 MS**  
**Matrix: Solid**  
**Analysis Batch: 107431**

**Client Sample ID: DS-10**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	942		249	1176		mg/Kg		94	90 - 110

**Lab Sample ID: 820-18382-11 MSD**  
**Matrix: Solid**  
**Analysis Batch: 107431**

**Client Sample ID: DS-10**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	942		249	1169		mg/Kg		91	90 - 110	1	20

### QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

#### GC VOA

##### Analysis Batch: 107288

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-13	DS-12	Total/NA	Solid	8021B	107296
MB 880-107296/5-A	Method Blank	Total/NA	Solid	8021B	107296
LCS 880-107296/1-A	Lab Control Sample	Total/NA	Solid	8021B	107296
LCSD 880-107296/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	107296

##### Analysis Batch: 107290

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	8021B	107356
820-18382-2	DS-2	Total/NA	Solid	8021B	107356
820-18382-3	DS-3	Total/NA	Solid	8021B	107356
820-18382-4	DS-4	Total/NA	Solid	8021B	107356
820-18382-5	DS-5	Total/NA	Solid	8021B	107356
820-18382-6	DS-6	Total/NA	Solid	8021B	107356
820-18382-7	DS-7	Total/NA	Solid	8021B	107356
820-18382-8	DS-8	Total/NA	Solid	8021B	107356
820-18382-9	DS-9	Total/NA	Solid	8021B	107356
820-18382-10	DS-10	Total/NA	Solid	8021B	107356
820-18382-11	DS-10	Total/NA	Solid	8021B	107356
820-18382-12	DS-11	Total/NA	Solid	8021B	107356
MB 880-107302/5-A	Method Blank	Total/NA	Solid	8021B	107302
MB 880-107356/5-A	Method Blank	Total/NA	Solid	8021B	107356
LCS 880-107356/1-A	Lab Control Sample	Total/NA	Solid	8021B	107356
LCSD 880-107356/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	107356

##### Prep Batch: 107296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-13	DS-12	Total/NA	Solid	5035	
MB 880-107296/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-107296/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-107296/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

##### Prep Batch: 107302

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-107302/5-A	Method Blank	Total/NA	Solid	5035	

##### Prep Batch: 107356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	5035	
820-18382-2	DS-2	Total/NA	Solid	5035	
820-18382-3	DS-3	Total/NA	Solid	5035	
820-18382-4	DS-4	Total/NA	Solid	5035	
820-18382-5	DS-5	Total/NA	Solid	5035	
820-18382-6	DS-6	Total/NA	Solid	5035	
820-18382-7	DS-7	Total/NA	Solid	5035	
820-18382-8	DS-8	Total/NA	Solid	5035	
820-18382-9	DS-9	Total/NA	Solid	5035	
820-18382-10	DS-10	Total/NA	Solid	5035	
820-18382-11	DS-10	Total/NA	Solid	5035	
820-18382-12	DS-11	Total/NA	Solid	5035	
MB 880-107356/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-107356/1-A	Lab Control Sample	Total/NA	Solid	5035	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

## GC VOA (Continued)

## Prep Batch: 107356 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-107356/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

## Analysis Batch: 107493

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	Total BTEX	
820-18382-2	DS-2	Total/NA	Solid	Total BTEX	
820-18382-3	DS-3	Total/NA	Solid	Total BTEX	
820-18382-4	DS-4	Total/NA	Solid	Total BTEX	
820-18382-5	DS-5	Total/NA	Solid	Total BTEX	
820-18382-6	DS-6	Total/NA	Solid	Total BTEX	
820-18382-7	DS-7	Total/NA	Solid	Total BTEX	
820-18382-8	DS-8	Total/NA	Solid	Total BTEX	
820-18382-9	DS-9	Total/NA	Solid	Total BTEX	
820-18382-10	DS-10	Total/NA	Solid	Total BTEX	
820-18382-11	DS-10	Total/NA	Solid	Total BTEX	
820-18382-12	DS-11	Total/NA	Solid	Total BTEX	
820-18382-13	DS-12	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 107423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	8015NM Prep	
820-18382-2	DS-2	Total/NA	Solid	8015NM Prep	
820-18382-3	DS-3	Total/NA	Solid	8015NM Prep	
820-18382-4	DS-4	Total/NA	Solid	8015NM Prep	
820-18382-5	DS-5	Total/NA	Solid	8015NM Prep	
820-18382-6	DS-6	Total/NA	Solid	8015NM Prep	
820-18382-7	DS-7	Total/NA	Solid	8015NM Prep	
MB 880-107423/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-107423/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-107423/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

## Prep Batch: 107466

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-8	DS-8	Total/NA	Solid	8015NM Prep	
820-18382-9	DS-9	Total/NA	Solid	8015NM Prep	
820-18382-10	DS-10	Total/NA	Solid	8015NM Prep	
820-18382-11	DS-10	Total/NA	Solid	8015NM Prep	
820-18382-12	DS-11	Total/NA	Solid	8015NM Prep	
820-18382-13	DS-12	Total/NA	Solid	8015NM Prep	
MB 880-107466/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-107466/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-107466/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-18382-8 MS	DS-8	Total/NA	Solid	8015NM Prep	
820-18382-8 MSD	DS-8	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 107472

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	8015B NM	107423
820-18382-2	DS-2	Total/NA	Solid	8015B NM	107423

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-18382-1  
SDG: Eddy County

## GC Semi VOA (Continued)

## Analysis Batch: 107472 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-3	DS-3	Total/NA	Solid	8015B NM	107423
820-18382-4	DS-4	Total/NA	Solid	8015B NM	107423
820-18382-5	DS-5	Total/NA	Solid	8015B NM	107423
820-18382-6	DS-6	Total/NA	Solid	8015B NM	107423
820-18382-7	DS-7	Total/NA	Solid	8015B NM	107423
820-18382-8	DS-8	Total/NA	Solid	8015B NM	107466
820-18382-9	DS-9	Total/NA	Solid	8015B NM	107466
820-18382-10	DS-10	Total/NA	Solid	8015B NM	107466
820-18382-11	DS-10	Total/NA	Solid	8015B NM	107466
820-18382-12	DS-11	Total/NA	Solid	8015B NM	107466
820-18382-13	DS-12	Total/NA	Solid	8015B NM	107466
MB 880-107423/1-A	Method Blank	Total/NA	Solid	8015B NM	107423
MB 880-107466/1-A	Method Blank	Total/NA	Solid	8015B NM	107466
LCS 880-107423/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	107423
LCS 880-107466/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	107466
LCSD 880-107423/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	107423
LCSD 880-107466/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	107466
820-18382-8 MS	DS-8	Total/NA	Solid	8015B NM	107466
820-18382-8 MSD	DS-8	Total/NA	Solid	8015B NM	107466

## Analysis Batch: 107600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Total/NA	Solid	8015 NM	
820-18382-2	DS-2	Total/NA	Solid	8015 NM	
820-18382-3	DS-3	Total/NA	Solid	8015 NM	
820-18382-4	DS-4	Total/NA	Solid	8015 NM	
820-18382-5	DS-5	Total/NA	Solid	8015 NM	
820-18382-6	DS-6	Total/NA	Solid	8015 NM	
820-18382-7	DS-7	Total/NA	Solid	8015 NM	
820-18382-8	DS-8	Total/NA	Solid	8015 NM	
820-18382-9	DS-9	Total/NA	Solid	8015 NM	
820-18382-10	DS-10	Total/NA	Solid	8015 NM	
820-18382-11	DS-10	Total/NA	Solid	8015 NM	
820-18382-12	DS-11	Total/NA	Solid	8015 NM	
820-18382-13	DS-12	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 107383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Soluble	Solid	DI Leach	
820-18382-2	DS-2	Soluble	Solid	DI Leach	
820-18382-3	DS-3	Soluble	Solid	DI Leach	
820-18382-4	DS-4	Soluble	Solid	DI Leach	
820-18382-5	DS-5	Soluble	Solid	DI Leach	
820-18382-6	DS-6	Soluble	Solid	DI Leach	
820-18382-7	DS-7	Soluble	Solid	DI Leach	
820-18382-8	DS-8	Soluble	Solid	DI Leach	
820-18382-9	DS-9	Soluble	Solid	DI Leach	
820-18382-10	DS-10	Soluble	Solid	DI Leach	
820-18382-11	DS-10	Soluble	Solid	DI Leach	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

## HPLC/IC (Continued)

## Leach Batch: 107383 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-12	DS-11	Soluble	Solid	DI Leach	
820-18382-13	DS-12	Soluble	Solid	DI Leach	
MB 880-107383/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-107383/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-107383/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-18382-1 MS	DS-1	Soluble	Solid	DI Leach	
820-18382-1 MSD	DS-1	Soluble	Solid	DI Leach	
820-18382-11 MS	DS-10	Soluble	Solid	DI Leach	
820-18382-11 MSD	DS-10	Soluble	Solid	DI Leach	

## Analysis Batch: 107431

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-18382-1	DS-1	Soluble	Solid	300.0	107383
820-18382-2	DS-2	Soluble	Solid	300.0	107383
820-18382-3	DS-3	Soluble	Solid	300.0	107383
820-18382-4	DS-4	Soluble	Solid	300.0	107383
820-18382-5	DS-5	Soluble	Solid	300.0	107383
820-18382-6	DS-6	Soluble	Solid	300.0	107383
820-18382-7	DS-7	Soluble	Solid	300.0	107383
820-18382-8	DS-8	Soluble	Solid	300.0	107383
820-18382-9	DS-9	Soluble	Solid	300.0	107383
820-18382-10	DS-10	Soluble	Solid	300.0	107383
820-18382-11	DS-10	Soluble	Solid	300.0	107383
820-18382-12	DS-11	Soluble	Solid	300.0	107383
820-18382-13	DS-12	Soluble	Solid	300.0	107383
MB 880-107383/1-A	Method Blank	Soluble	Solid	300.0	107383
LCS 880-107383/2-A	Lab Control Sample	Soluble	Solid	300.0	107383
LCSD 880-107383/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	107383
820-18382-1 MS	DS-1	Soluble	Solid	300.0	107383
820-18382-1 MSD	DS-1	Soluble	Solid	300.0	107383
820-18382-11 MS	DS-10	Soluble	Solid	300.0	107383
820-18382-11 MSD	DS-10	Soluble	Solid	300.0	107383

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-1**

**Lab Sample ID: 820-18382-1**

Date Collected: 04/08/25 16:40

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 02:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 02:38	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/11/25 23:26	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/11/25 23:26	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 09:39	CH	EET MID

**Client Sample ID: DS-2**

**Lab Sample ID: 820-18382-2**

Date Collected: 04/08/25 16:45

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 02:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 02:58	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/11/25 23:43	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/11/25 23:43	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 09:56	CH	EET MID

**Client Sample ID: DS-3**

**Lab Sample ID: 820-18382-3**

Date Collected: 04/08/25 16:48

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 04:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 04:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/11/25 23:59	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/11/25 23:59	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	107431	04/11/25 10:02	CH	EET MID

**Client Sample ID: DS-4**

**Lab Sample ID: 820-18382-4**

Date Collected: 04/08/25 16:54

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 05:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 05:08	AJ	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-4**

**Lab Sample ID: 820-18382-4**

Date Collected: 04/08/25 16:54

Matrix: Solid

Date Received: 04/09/25 13:52

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			107600	04/12/25 00:15	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 00:15	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 10:08	CH	EET MID

**Client Sample ID: DS-5**

**Lab Sample ID: 820-18382-5**

Date Collected: 04/08/25 17:00

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 05:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 05:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 00:31	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 00:31	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	107431	04/11/25 10:13	CH	EET MID

**Client Sample ID: DS-6**

**Lab Sample ID: 820-18382-6**

Date Collected: 04/08/25 17:06

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 05:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 05:49	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 00:47	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 00:47	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 10:31	CH	EET MID

**Client Sample ID: DS-7**

**Lab Sample ID: 820-18382-7**

Date Collected: 04/08/25 17:12

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 06:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 06:10	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 01:03	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	107423	04/11/25 08:04	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 01:03	TKC	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-7**

**Lab Sample ID: 820-18382-7**

Date Collected: 04/08/25 17:12

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		20	50 mL	50 mL	107431	04/11/25 10:37	CH	EET MID

**Client Sample ID: DS-8**

**Lab Sample ID: 820-18382-8**

Date Collected: 04/08/25 17:18

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 06:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 06:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 03:13	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 03:13	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	107431	04/11/25 10:43	CH	EET MID

**Client Sample ID: DS-9**

**Lab Sample ID: 820-18382-9**

Date Collected: 04/08/25 17:25

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 06:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 06:50	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 04:01	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 04:01	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	107431	04/11/25 10:48	CH	EET MID

**Client Sample ID: DS-10**

**Lab Sample ID: 820-18382-10**

Date Collected: 04/08/25 17:40

Matrix: Solid

Date Received: 04/09/25 13:52

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 07:11	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 07:11	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 04:17	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 04:17	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	107431	04/11/25 10:54	CH	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
 SDG: Eddy County

**Client Sample ID: DS-10**

**Lab Sample ID: 820-18382-11**

**Date Collected: 04/08/25 17:52**

**Matrix: Solid**

**Date Received: 04/09/25 13:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 07:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 07:31	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 04:34	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 04:34	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 11:00	CH	EET MID

**Client Sample ID: DS-11**

**Lab Sample ID: 820-18382-12**

**Date Collected: 04/08/25 17:29**

**Matrix: Solid**

**Date Received: 04/09/25 13:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107356	04/10/25 11:40	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107290	04/11/25 07:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/11/25 07:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 04:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 04:50	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	107431	04/11/25 11:17	CH	EET MID

**Client Sample ID: DS-12**

**Lab Sample ID: 820-18382-13**

**Date Collected: 04/08/25 18:10**

**Matrix: Solid**

**Date Received: 04/09/25 13:52**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	107296	04/10/25 08:46	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	107288	04/10/25 19:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			107493	04/10/25 19:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			107600	04/12/25 05:06	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	107466	04/11/25 12:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	107472	04/12/25 05:06	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	107383	04/10/25 14:20	SA	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	107431	04/11/25 11:23	CH	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

#### Laboratory: Eurofins Midland

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

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

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

# Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-18382-1  
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-18382-1	DS-1	Solid	04/08/25 16:40	04/09/25 13:52	0.5 - 1.0
820-18382-2	DS-2	Solid	04/08/25 16:45	04/09/25 13:52	0.5 - 1.0
820-18382-3	DS-3	Solid	04/08/25 16:48	04/09/25 13:52	0.5 - 1.0
820-18382-4	DS-4	Solid	04/08/25 16:54	04/09/25 13:52	0.5 - 1.0
820-18382-5	DS-5	Solid	04/08/25 17:00	04/09/25 13:52	0.5 - 1.0
820-18382-6	DS-6	Solid	04/08/25 17:06	04/09/25 13:52	0.5 - 1.0
820-18382-7	DS-7	Solid	04/08/25 17:12	04/09/25 13:52	0.5 - 1.0
820-18382-8	DS-8	Solid	04/08/25 17:18	04/09/25 13:52	0.5 - 1.0
820-18382-9	DS-9	Solid	04/08/25 17:25	04/09/25 13:52	1.5 - 2.0
820-18382-10	DS-10	Solid	04/08/25 17:40	04/09/25 13:52	0.5 - 1.0
820-18382-11	DS-10	Solid	04/08/25 17:52	04/09/25 13:52	4..5 - 5.0
820-18382-12	DS-11	Solid	04/08/25 17:29	04/09/25 13:52	0.5 - 1.0
820-18382-13	DS-12	Solid	04/08/25 18:10	04/09/25 13:52	0.5 - 1.0

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

Loc: 820  
18382

eurofins

CalScience

4145 Greenbriar Dr., Stafford, TX 77477  
(214) 240-4200

**CHAIN-OF-CUSTODY ANALYSIS REQUEST**

**Company Name:** Terracon  
**Project Manager:** Chuck Smith  
**Address:** 5047 50th Street, Lubbock, TX 79424  
**Phone #:** 808-300-0140  
**Project #:** K1247067  
**Project Name:** Susapping 12 CTB 2  
**Project Location:** Eddy County  
**Sampler Name:** Chuck Smith

**BILL TO:**  
**P.O. #:**  
**Company:** Devon Energy  
**Attn:** Jhn Riley  
**Address:** 205 E. Bender Rd., Carlsbad, NM  
**State:** NM  
**Phone #:**  
**Fax #:**

Lab I.D.	Sample I.D.	Depth (ft)	# CONTAINERS	MATRIX				PRESERV.			DATE	TIME	Chloride (EPA Method 4500)	TPE Extended 8015	BTEX (EPA Method 8021B)
				GROUNDWATER	WASTEWATER	SOIL	SLUDGE	OTHER:	ACID BLENDED	ICE / COOL					
CS-1		0.5-1.0	G 1	X				X			4/8/2025	4:40 PM	X	X	X
CS-2		0.5-1.0	G 1	X				X			4/8/2025	4:45 PM	X	X	X
CS-3		0.5-1.0	G 1	X				X			4/8/2025	4:46 PM	X	X	X
CS-4		0.5-1.0	G 1	X				X			4/8/2025	4:54 PM	X	X	X
CS-5		0.5-1.0	G 1	X				X			4/8/2025	5:00 PM	X	X	X
CS-6		0.5-1.0	G 1	X				X			4/8/2025	5:06 PM	X	X	X
CS-7		0.5-1.0	G 1	X				X			4/8/2025	5:12 PM	X	X	X
CS-8		0.5-1.0	G 1	X				X			4/8/2025	5:18 PM	X	X	X
CS-9		1.5-2.0	G 1	X				X			4/8/2025	5:26 PM	X	X	X
CS-10		0.5-1.0	G 1	X				X			4/8/2025	5:40 PM	X	X	X
CS-10		4.5-5.0	G 1	X				X			4/8/2025	5:53 PM	X	X	X
CS-11		0.5-1.0	G 1	X				X			4/8/2025	5:29 PM	X	X	X
CS-12		0.5-1.0	G 1	X				X			4/8/2025	6:10 PM	X	X	X

**Relinquished By:** [Signature] **Received By:** *Jaymean Rowe*  
**Date:** 8/9/25  
**Time:** 1:52 PM

**Relinquished By:** [Signature] **Received By:** [Signature]  
**Date:** [Blank] **Time:** [Blank]

**Delivered By:** (Circle One) **Observed Temp. °C:** 4.6  
**Sampler - UPS - Bus - Other:** **Corrected Temp. °C:** 4.9

**Verbal Result:**  Yes  No **Add'l Phone #:**  
**Remarks:** All Results are emailed. Please provide Email address: chuck.smith@terracon.com; joseph.guessner@terracon.com

**Turnaround Times:** Standard  Rush   
**Thermometer ID #113** **Correction Factor: -0.2°C**

**Checked By:** (Initials) *JR*  
**Sample Condition:** Cool  Injunct  Yes  No  
**Bacteria (only) Sample Condition:** Cool  Yes  No  
**Observed Temp. °C:** **Corrected Temp. °C:**

FORM-006 R 3.2 100721

**Eurofins Lubbock**  
6701 Aberdeen Ave, Suite 8  
Lubbock, TX 79424  
Phone: 806-794-1296

### Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Sampler: N/A	Lab PM: Kramer, Jessica	Carrier Tracking No(s): N/A	COC No: 820-10596-1
Client Contact: Shipping/Receiving		Phone: N/A	E-Mail: Jessica.Kramer@et.eurofins.com	State of Origin: Texas	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 820-18382-1	Preservation Codes:
Address: 1211 W. Florida Ave,		Due Date Requested: 4/15/2025		Analysis Requested:	
City: Midland		TAT Requested (days): N/A		Total Number of Containers: 1	
State, Zip: TX, 79701		PO #: N/A		6015MOD_Calc	
Phone: 432-704-5440(Tel)		WO #: N/A		8015MOD_MM/8015NM_S_Prep Full TPH	
Email: N/A		Project #: 88000422		Total_BTEX_GCV	
Project Name: Snapping 12 CTB 2		SSOW#: N/A		8021B/5035FP_Calc BTEX	
Site: N/A		Matrix (Water, Solid, Sewastoid, Other: N/A)		300_ORGM_28D/DI_LEACH Chloride	
<b>Sample Identification - Client ID (Lab ID)</b>		Sample Date		Perform MS/MSD (Yes or No)	
DS-1 (820-18382-1)		4/8/25		Field Filtered Sample (Yes or No)	
DS-2 (820-18382-2)		4/8/25		Preservation Code:	
DS-3 (820-18382-3)		4/8/25		G Solid	
DS-4 (820-18382-4)		4/8/25		G Solid	
DS-5 (820-18382-5)		4/8/25		G Solid	
DS-6 (820-18382-6)		4/8/25		G Solid	
DS-7 (820-18382-7)		4/8/25		G Solid	
DS-8 (820-18382-8)		4/8/25		G Solid	
DS-9 (820-18382-9)		4/8/25		G Solid	
<p>Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte &amp; accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.</p>					
<b>Possible Hazard Identification</b>					
<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months <input type="checkbox"/> Unconfirmed <input type="checkbox"/> Special Instructions/QC Requirements:					
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2					
Empty Kit Relinquished by:		Date: 4/9/25 17:00		Method of Shipment:	
Relinquished by:		Company		Received by: <i>Toby Anderson</i>	
Relinquished by:		Company		Date/Time: 4/10/25 10:35	
Relinquished by:		Company		Date/Time:	
Relinquished by:		Company		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) and Other Remarks: 3.4/3.3°C I.R.8 -01	



Ver: 10/10/2024

**Eurofins Lubbock**  
6701 Aberdeen Ave, Suite 8  
Lubbock, TX 79424  
Phone: 806-794-1296

### Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>		Sampler: N/A	Lab PM: Kramer, Jessica	Carrier Tracking No(s): N/A	COC No: 820-10596.2
Client Contact: Shipping/Receiving		Phone: N/A	E-Mail: Jessica.Kramer@et.eurofins.com	State of Origin: Texas	Page: Page 2 of 2
Company: Eurofins Environment Testing South Cent		Accreditations Required (See note): NELAP - Texas		Job #: 820-18382-1	Preservation Codes:
Address: 1211 W. Florida Ave,		Due Date Requested: 4/15/2025		Analysis Requested:	
City: Midland		TAT Requested (days): N/A		8015MOD_Calc	
State, Zip: TX, 79701		PO #: N/A		8015MOD_NM/8015NM_S_Prep Full TPH	
Phone: 432-704-5440(Tel)		WO #: N/A		Total_BTEX_GCV	
Email: N/A		Project #: 88000422		8021B/5035FP_Calc BTEX	
Project Name: Snapping 12 CTB 2		SSOW#: N/A		300_ORGFM_28D/DI_LEACH Chloride	
Site: N/A		Matrix (W=water, S=solid, O=oil, A=air)		Perform MS/MSD (Yes or No)	
		Sample Type (C=Comp, G=grab)		Field Filtered Sample (Yes or No)	
		Sample Time		Preservation Code:	
		Sample Date		Total Number of Containers	
<b>Sample Identification - Client ID (Lab ID)</b>		Sample Date		Special Instructions/Note:	
DS-10 (820-18382-10)	4/8/25	17:40 Central	G Solid	X	1
DS-10 (820-18382-11)	4/8/25	17:52 Central	G Solid	X	1
DS-11 (820-18382-12)	4/8/25	17:29 Central	G Solid	X	1
DS-12 (820-18382-13)	4/8/25	18:10 Central	G Solid	X	1

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to Eurofins Environment Testing South Central, LLC.

**Possible Hazard Identification**  
 Unconfirmed  
 Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2  
 Empty/Relinquished by: \_\_\_\_\_ Date: 4/9/25 17:00  
 Relinquished by: \_\_\_\_\_ Date/Time: 4/9/25 17:00  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Custody Seals Intact:  Yes  No  No  
 Cooler Temperature(s) °C and Other Remarks:

**Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)**  
 Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Special Instructions/QC Requirements:

Method of Shipment: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: 4/9/25 10:35  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company: \_\_\_\_\_  
 Company: \_\_\_\_\_



### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-18382-1

SDG Number: Eddy County

**Login Number: 18382**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-18382-1  
SDG Number: Eddy County

**Login Number: 18382**  
**List Number: 2**  
**Creator: Lee, Randell**

**List Source: Eurofins Midland**  
**List Creation: 04/10/25 12:27 PM**

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

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



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 10/3/2025 1:03:13 PM

## JOB DESCRIPTION

Snapping 12 CTB 2 Incident # nAPP2508758656  
 KH247057

## JOB NUMBER

820-21183-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
10/3/2025 1:03:13 PM

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Laboratory Job ID: 820-21183-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	16
Certification Summary . . . . .	17
Method Summary . . . . .	18
Sample Summary . . . . .	19
Chain of Custody . . . . .	20
Receipt Checklists . . . . .	22

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1

**Job ID: 820-21183-1**

**Eurofins Lubbock**

## Job Narrative 820-21183-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/26/2025 3:29 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.4°C.

### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside the upper control limit: CFS-1 (820-21183-1) and CFS-2 (820-21183-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-120162 and analytical batch 880-120265 was outside the upper control limits.

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-120047/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-120155 and analytical batch 880-120174 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CFS-1**

**Lab Sample ID: 820-21183-1**

Date Collected: 09/24/25 09:55

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/01/25 09:59	10/02/25 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	10/01/25 09:59	10/02/25 21:57	1
1,4-Difluorobenzene (Surr)	102		70 - 130	10/01/25 09:59	10/02/25 21:57	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/02/25 21:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/25 08:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	104		70 - 130	09/30/25 08:08	10/03/25 08:15	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:08	10/03/25 08:15	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	665		9.96		mg/Kg			10/01/25 13:04	1

**Client Sample ID: CFS-2**

**Lab Sample ID: 820-21183-2**

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/01/25 09:59	10/02/25 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	10/01/25 09:59	10/02/25 22:17	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CFS-2**

**Lab Sample ID: 820-21183-2**

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	116		70 - 130	10/01/25 09:59	10/02/25 22:17	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/02/25 22:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/03/25 08:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130	09/30/25 08:08	10/03/25 08:29	1
o-Terphenyl (Surr)	114		70 - 130	09/30/25 08:08	10/03/25 08:29	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3270		49.9		mg/Kg			10/01/25 13:10	5

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 0.0 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/01/25 09:59	10/02/25 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	10/01/25 09:59	10/02/25 22:38	1
1,4-Difluorobenzene (Surr)	113		70 - 130	10/01/25 09:59	10/02/25 22:38	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/02/25 22:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/25 08:44	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 0.0 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	87		70 - 130	09/30/25 08:08	10/03/25 08:44	1
o-Terphenyl (Surr)	107		70 - 130	09/30/25 08:08	10/03/25 08:44	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1440		9.92		mg/Kg			10/01/25 13:28	1

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-21183-1	CFS-1	131 S1+	102
820-21183-2	CFS-2	135 S1+	116
820-21183-3	CWS-1	130	113
890-8886-A-31-E MS	Matrix Spike	102	95
890-8886-A-31-F MSD	Matrix Spike Duplicate	101	95
LCS 880-120162/1-A	Lab Control Sample	102	97
LCSD 880-120162/2-A	Lab Control Sample Dup	104	96
MB 880-120162/5-A	Method Blank	158 S1+	98

**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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
820-21183-1	CFS-1	104	124
820-21183-2	CFS-2	92	114
820-21183-3	CWS-1	87	107
890-8882-A-33-B MS	Matrix Spike	92	112
890-8882-A-33-C MSD	Matrix Spike Duplicate	101	123
LCS 880-120047/2-A	Lab Control Sample	108	126
LCSD 880-120047/3-A	Lab Control Sample Dup	115	135 S1+
MB 880-120047/1-A	Method Blank	108	124

**Surrogate Legend**  
 1CO = 1-Chlorooctane (Surr)  
 OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-120162/5-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	10/01/25 09:59	10/02/25 14:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 09:59	10/02/25 14:10	1

Lab Sample ID: LCS 880-120162/1-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1028		mg/Kg		103	70 - 130
Toluene	0.100	0.08437		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08276		mg/Kg		83	70 - 130
m,p-Xylenes	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09611		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-120162/2-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1029		mg/Kg		103	70 - 130	0	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.09015		mg/Kg		90	70 - 130	9	35
m,p-Xylenes	0.200	0.2018		mg/Kg		101	70 - 130	11	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-8886-A-31-E MS  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1026		mg/Kg		103	70 - 130
Toluene	<0.00200	U	0.100	0.07995		mg/Kg		80	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Lab Sample ID: 890-8886-A-31-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.08459		mg/Kg		85	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.100	0.09614		mg/Kg		96	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-8886-A-31-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00200	U	0.100	0.1009		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.08298		mg/Kg		83	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.07475		mg/Kg		75	70 - 130	12	35
m,p-Xylenes	<0.00399	U	0.200	0.1589		mg/Kg		79	70 - 130	14	35
o-Xylene	<0.00200	U	0.100	0.08859		mg/Kg		89	70 - 130	8	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-120047/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	108		70 - 130	09/30/25 08:07	10/03/25 02:35	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:07	10/03/25 02:35	1

Lab Sample ID: LCS 880-120047/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	923.0		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	877.9		mg/Kg		88	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

**Lab Sample ID: LCS 880-120047/2-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	108		70 - 130
o-Terphenyl (Surr)	126		70 - 130

**Lab Sample ID: LCSD 880-120047/3-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1045		mg/Kg		105	70 - 130	12	20	
Diesel Range Organics (Over C10-C28)	1000	960.8		mg/Kg		96	70 - 130	9	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	115		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

**Lab Sample ID: 890-8882-A-33-B MS**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	849.5		mg/Kg		85	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	763.2		mg/Kg		76	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	92		70 - 130
o-Terphenyl (Surr)	112		70 - 130

**Lab Sample ID: 890-8882-A-33-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	972.4		mg/Kg		97	70 - 130	13	20	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.8		mg/Kg		86	70 - 130	12	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	101		70 - 130
o-Terphenyl (Surr)	123		70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120155/1-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 12:17	1

Lab Sample ID: LCS 880-120155/2-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-120155/3-A  
 Matrix: Solid  
 Analysis Batch: 120174

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	251.6		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 820-21177-A-1-C MS  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1270		251	1456	4	mg/Kg		76	90 - 110

Lab Sample ID: 820-21177-A-1-D MSD  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1270		251	1461	4	mg/Kg		78	90 - 110	0	20

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## GC VOA

## Prep Batch: 120162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	5035	
820-21183-2	CFS-2	Total/NA	Solid	5035	
820-21183-3	CWS-1	Total/NA	Solid	5035	
MB 880-120162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	5035	
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 120265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8021B	120162
820-21183-2	CFS-2	Total/NA	Solid	8021B	120162
820-21183-3	CWS-1	Total/NA	Solid	8021B	120162
MB 880-120162/5-A	Method Blank	Total/NA	Solid	8021B	120162
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	8021B	120162
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120162
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	8021B	120162
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	120162

## Analysis Batch: 120465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	Total BTEX	
820-21183-2	CFS-2	Total/NA	Solid	Total BTEX	
820-21183-3	CWS-1	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 120047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015NM Prep	
820-21183-2	CFS-2	Total/NA	Solid	8015NM Prep	
820-21183-3	CWS-1	Total/NA	Solid	8015NM Prep	
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 120308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015B NM	120047
820-21183-2	CFS-2	Total/NA	Solid	8015B NM	120047
820-21183-3	CWS-1	Total/NA	Solid	8015B NM	120047
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015B NM	120047
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120047
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120047
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015B NM	120047
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	120047

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## GC Semi VOA

## Analysis Batch: 120449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015 NM	
820-21183-2	CFS-2	Total/NA	Solid	8015 NM	
820-21183-3	CWS-1	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 120155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Soluble	Solid	DI Leach	
820-21183-2	CFS-2	Soluble	Solid	DI Leach	
820-21183-3	CWS-1	Soluble	Solid	DI Leach	
MB 880-120155/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 120174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Soluble	Solid	300.0	120155
820-21183-2	CFS-2	Soluble	Solid	300.0	120155
820-21183-3	CWS-1	Soluble	Solid	300.0	120155
MB 880-120155/1-A	Method Blank	Soluble	Solid	300.0	120155
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	300.0	120155
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120155
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	120155
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	120155

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CFS-1**

**Lab Sample ID: 820-21183-1**

Date Collected: 09/24/25 09:55

Matrix: Solid

Date Received: 09/26/25 15:29

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	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 21:57	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 21:57	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:15	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 13:04	CS	EET MID

**Client Sample ID: CFS-2**

**Lab Sample ID: 820-21183-2**

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

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	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 22:17	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 22:17	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:29	FC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120174	10/01/25 13:10	CS	EET MID

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 22:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 22:38	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:44	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:44	FC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 13:28	CS	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
SDG: KH247057

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-21183-1	CFS-1	Solid	09/24/25 09:55	09/26/25 15:29	2.0 - 2.5
820-21183-2	CFS-2	Solid	09/24/25 10:00	09/26/25 15:29	2.0 - 2.5
820-21183-3	CWS-1	Solid	09/24/25 10:05	09/26/25 15:29	0.0 - 2

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

21183

CHAIN OF CUSTODY RECORD

LAB USE ONLY  
DUE DATE: \_\_\_\_\_

TEMP OF COOLER WHEN RECEIVED (°C) -21.4  
12/14  
1841-0.2

Page 1 of 1



Laboratory: Eurofins  
Address: 6701 Aberdeen  
Lubbock, Texas 79424

Phone: (806) 794-1296  
Contact: Holly Taylor

Office Location: Lubbock, Texas  
Project Manager: Chuck Smith

Sampler's Name: Daniel Pavelka  
Sampler's Signature: *[Signature]*

Project Number: KH247057  
Project Name: Snapping 12 CTB 2 Incident # nAPP2508758656

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers	
								4 oz Glass	
S	9/24/2025	9:55	X		CFS-1	2.0	2.5	1	
S	9/24/2025	10:00	X		CFS-2	2.0	2.5	1	
S	9/24/2025	10:05	X		CWS-1	0.0	2	1	

NFE

TURNAROUND TIME:  Standard  48-Hour Rush  24-Hour Rush

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
<i>[Signature]</i>	9/24/25	8:30	<i>[Signature]</i>	9/24/25	8:30
<i>[Signature]</i>	9/24/25	15:29	<i>[Signature]</i>	9/24/25	15:29
<i>[Signature]</i>					
<i>[Signature]</i>					

Bill To: Devon Energy. Attn: Jim Raley Address: 5315 Buena Vista Dr.,  
Cralbsbad, Nm 88220. On Invoice Reference WO # 21550556 and  
Incident No: nAPP2508758656

e-mail results to:  
chuck.smith@terracon.com  
joseph.guesnier@terracon.com

Matrix: WW-Wastewater  
Container: VOA - 40 ml vial

W - Water  
A/G - Amber Glass 1L

S - Soil  
250 ml = Glass wide mouth

L - Liquid  
P/O - Plastic or other \_\_\_\_\_

A - Air Bag  
C - Charcoal tube

SL - Sludge

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable

Loc: 820  
21183





### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21183-1

SDG Number: KH247057

**Login Number: 21183**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21183-1

SDG Number: KH247057

**Login Number: 21183**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**

**List Creation: 09/30/25 02:56 PM**

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	

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

**Delineation Sample Analytical Results  
4<sup>th</sup> NMOCD Incident # nAPP2512029165**



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 5/30/2025 12:13:57 PM Revision 1

## JOB DESCRIPTION

Snapping 12 CTB 2  
 Eddy County

## JOB NUMBER

820-19072-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



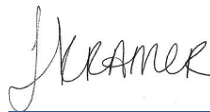
# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
5/30/2025 12:13:57 PM  
Revision 1

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Laboratory Job ID: 820-19072-1  
SDG: Eddy County

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	7
Surrogate Summary . . . . .	16
QC Sample Results . . . . .	18
QC Association Summary . . . . .	25
Lab Chronicle . . . . .	29
Certification Summary . . . . .	33
Method Summary . . . . .	34
Sample Summary . . . . .	35
Chain of Custody . . . . .	36
Receipt Checklists . . . . .	37

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## Glossary

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

Eurofins Lubbock

## Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-19072-1

**Job ID: 820-19072-1**

**Eurofins Lubbock**

### Job Narrative 820-19072-1

#### REVISION

The report being provided is a revision of the original report sent on 5/30/2025. The report (revision 1) is being revised due to Per client email, requesting sample ID corrections.

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

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

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

#### **Receipt**

The samples were received on 5/23/2025 2:19 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

#### **Receipt Exceptions**

The COC says for the TPH method, 'TPH Extended 8015', and so I wasn't sure if I still do the normal TX\_1005. I went ahead and added both. DS-1 (0.5'-1.0') (820-19072-1), DS-1 (3.5'-4.0') (820-19072-2), DS-2 (0.5'-1.0') (820-19072-3), DS-2 (3.5'-4.0') (820-19072-4), DS-3 (0.5'-1.0') (820-19072-5), DS-3 (3.5'-4.0') (820-19072-6), DS-4 (0.5'-1.0') (820-19072-7), DS-4 (3.5'-4.0') (820-19072-8), DS-2 (6.0'-6.5') (820-19072-9), DS-3 (6.0'-6.5') (820-19072-10) and DS-1 (8.0'-8.5') (820-19072-11)

The following samples were received and analyzed from an unpreserved bulk soil jar: DS-1 (0.5'-1.0') (820-19072-1), DS-1 (3.5'-4.0') (820-19072-2), DS-2 (0.5'-1.0') (820-19072-3), DS-2 (3.5'-4.0') (820-19072-4), DS-3 (0.5'-1.0') (820-19072-5), DS-3 (3.5'-4.0') (820-19072-6), DS-4 (0.5'-1.0') (820-19072-7), DS-4 (3.5'-4.0') (820-19072-8), DS-2 (6.0'-6.5') (820-19072-9), DS-3 (6.0'-6.5') (820-19072-10) and DS-1 (8.0'-8.5') (820-19072-11)

#### **GC VOA**

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-111059 and analytical batch 880-111031 was outside the upper control limits.

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110951 and analytical batch 880-111033 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-110951 and analytical batch 880-111033 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD\_NM: The method blank for preparation batch 880-110951 and analytical batch 880-111033 contained Gasoline Range Organics (GRO)-C6-C10 above the method detection limit. This target analyte concentration was less than the reporting limit (RL) in the method blank; therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-111074/2-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Eurofins Lubbock

### Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-19072-1

#### Job ID: 820-19072-1 (Continued)

**Eurofins Lubbock**

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-111074 and analytical batch 880-111132 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-111074 and analytical batch 880-111132 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-111071 and analytical batch 880-111079 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19072-1  
SDG: Eddy County

Client Sample ID: DS-1 (0.5'-1.0')

Lab Sample ID: 820-19072-1

Date Collected: 05/22/25 14:30

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

## 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		05/28/25 13:00	05/28/25 16:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 16:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 16:43	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/28/25 13:00	05/28/25 16:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 16:43	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/28/25 13:00	05/28/25 16:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/28/25 13:00	05/28/25 16:43	1
1,4-Difluorobenzene (Surr)	90		70 - 130	05/28/25 13:00	05/28/25 16:43	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400		mg/Kg			05/28/25 16:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/29/25 00:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		05/27/25 09:52	05/29/25 00:07	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/27/25 09:52	05/29/25 00:07	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/27/25 09:52	05/29/25 00:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	82		70 - 130	05/27/25 09:52	05/29/25 00:07	1
o-Terphenyl (Surr)	80		70 - 130	05/27/25 09:52	05/29/25 00:07	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4970	F1	49.8		mg/Kg			05/29/25 09:17	5

Client Sample ID: DS-1 (3.5'-4.0')

Lab Sample ID: 820-19072-2

Date Collected: 05/22/25 14:40

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/28/25 13:00	05/28/25 17:03	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/28/25 13:00	05/28/25 17:03	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/28/25 13:00	05/28/25 17:03	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		05/28/25 13:00	05/28/25 17:03	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/28/25 13:00	05/28/25 17:03	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/28/25 13:00	05/28/25 17:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	05/28/25 13:00	05/28/25 17:03	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-1 (3.5'-4.0')**

**Lab Sample ID: 820-19072-2**

Date Collected: 05/22/25 14:40

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	101		70 - 130	05/28/25 13:00	05/28/25 17:03	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			05/28/25 17:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/29/25 00:22	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		05/27/25 09:52	05/29/25 00:22	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/27/25 09:52	05/29/25 00:22	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/27/25 09:52	05/29/25 00:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	82		70 - 130	05/27/25 09:52	05/29/25 00:22	1
o-Terphenyl (Surr)	77		70 - 130	05/27/25 09:52	05/29/25 00:22	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1860		49.9		mg/Kg			05/29/25 09:38	5

**Client Sample ID: DS-2 (0.5'-1.0')**

**Lab Sample ID: 820-19072-3**

Date Collected: 05/22/25 14:50

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/28/25 13:00	05/28/25 17:24	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/28/25 13:00	05/28/25 17:24	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/28/25 13:00	05/28/25 17:24	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		05/28/25 13:00	05/28/25 17:24	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/28/25 13:00	05/28/25 17:24	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/28/25 13:00	05/28/25 17:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	05/28/25 13:00	05/28/25 17:24	1
1,4-Difluorobenzene (Surr)	94		70 - 130	05/28/25 13:00	05/28/25 17:24	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/28/25 17:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			05/29/25 00:38	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

## Client Sample ID: DS-2 (0.5'-1.0')

Lab Sample ID: 820-19072-3

Date Collected: 05/22/25 14:50

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

## 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		05/27/25 09:52	05/29/25 00:38	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/27/25 09:52	05/29/25 00:38	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/27/25 09:52	05/29/25 00:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	86		70 - 130				05/27/25 09:52	05/29/25 00:38	1
o-Terphenyl (Surr)	83		70 - 130				05/27/25 09:52	05/29/25 00:38	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11800		198		mg/Kg			05/29/25 09:45	20

## Client Sample ID: DS-2 (3.5'-4.0')

Lab Sample ID: 820-19072-4

Date Collected: 05/22/25 14:55

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/28/25 13:00	05/28/25 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130				05/28/25 13:00	05/28/25 17:44	1
1,4-Difluorobenzene (Surr)	96		70 - 130				05/28/25 13:00	05/28/25 17:44	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/28/25 17:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/29/25 00:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 00:54	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 00:54	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 00:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	84		70 - 130				05/27/25 09:52	05/29/25 00:54	1
o-Terphenyl (Surr)	79		70 - 130				05/27/25 09:52	05/29/25 00:54	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-2 (3.5'-4.0')**

**Lab Sample ID: 820-19072-4**

Date Collected: 05/22/25 14:55

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2200		50.1		mg/Kg			05/29/25 09:52	5

**Client Sample ID: DS-3 (0.5'-1.0')**

**Lab Sample ID: 820-19072-5**

Date Collected: 05/22/25 15:05

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/28/25 13:00	05/28/25 18:05	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/28/25 13:00	05/28/25 18:05	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/28/25 13:00	05/28/25 18:05	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		05/28/25 13:00	05/28/25 18:05	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/28/25 13:00	05/28/25 18:05	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/28/25 13:00	05/28/25 18:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/28/25 13:00	05/28/25 18:05	1
1,4-Difluorobenzene (Surr)	98		70 - 130	05/28/25 13:00	05/28/25 18:05	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/28/25 18:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/29/25 01:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 01:10	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 01:10	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/27/25 09:52	05/29/25 01:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	85		70 - 130	05/27/25 09:52	05/29/25 01:10	1
o-Terphenyl (Surr)	81		70 - 130	05/27/25 09:52	05/29/25 01:10	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14500		199		mg/Kg			05/29/25 09:59	20

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-3 (3.5'-4.0')**

**Lab Sample ID: 820-19072-6**

Date Collected: 05/22/25 15:10

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

**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		05/29/25 09:48	05/29/25 12:22	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:22	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:22	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		05/29/25 09:48	05/29/25 12:22	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:22	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/29/25 09:48	05/29/25 12:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	05/29/25 09:48	05/29/25 12:22	1
1,4-Difluorobenzene (Surr)	85		70 - 130	05/29/25 09:48	05/29/25 12:22	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			05/29/25 12:22	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/29/25 20:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1 F1	50.1		mg/Kg		05/28/25 16:26	05/29/25 20:59	1
Diesel Range Organics (Over C10-C28)	<50.1	U F1	50.1		mg/Kg		05/28/25 16:26	05/29/25 20:59	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/28/25 16:26	05/29/25 20:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	05/28/25 16:26	05/29/25 20:59	1
o-Terphenyl (Surr)	89		70 - 130	05/28/25 16:26	05/29/25 20:59	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	631		9.96		mg/Kg			05/29/25 11:39	1

**Client Sample ID: DS-4 (0.5'-1.0')**

**Lab Sample ID: 820-19072-7**

Date Collected: 05/22/25 15:20

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:48	05/29/25 12:43	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:48	05/29/25 12:43	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:48	05/29/25 12:43	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		05/29/25 09:48	05/29/25 12:43	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:48	05/29/25 12:43	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/29/25 09:48	05/29/25 12:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	05/29/25 09:48	05/29/25 12:43	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-4 (0.5'-1.0')**

**Lab Sample ID: 820-19072-7**

Date Collected: 05/22/25 15:20

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0,5'-1.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130	05/29/25 09:48	05/29/25 12:43	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/29/25 12:43	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/29/25 21:49	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1	50.1		mg/Kg		05/28/25 16:26	05/29/25 21:49	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		05/28/25 16:26	05/29/25 21:49	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/28/25 16:26	05/29/25 21:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130	05/28/25 16:26	05/29/25 21:49	1
o-Terphenyl (Surr)	91		70 - 130	05/28/25 16:26	05/29/25 21:49	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1840		49.9		mg/Kg			05/29/25 11:46	5

**Client Sample ID: DS-4 (3.5'-4.0')**

**Lab Sample ID: 820-19072-8**

Date Collected: 05/22/25 15:30

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 13:03	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 13:03	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 13:03	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		05/29/25 09:48	05/29/25 13:03	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 13:03	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/29/25 09:48	05/29/25 13:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	05/29/25 09:48	05/29/25 13:03	1
1,4-Difluorobenzene (Surr)	85		70 - 130	05/29/25 09:48	05/29/25 13:03	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/29/25 13:03	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/29/25 22:05	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-4 (3.5'-4.0')**

**Lab Sample ID: 820-19072-8**

Date Collected: 05/22/25 15:30

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 3.5'-4.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/28/25 16:26	05/29/25 22:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 22:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 22:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	05/28/25 16:26	05/29/25 22:05	1
o-Terphenyl (Surr)	77		70 - 130	05/28/25 16:26	05/29/25 22:05	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	711		9.92		mg/Kg			05/29/25 11:53	1

**Client Sample ID: DS-2 (6.0'-6.5')**

**Lab Sample ID: 820-19072-9**

Date Collected: 05/22/25 15:50

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 6.0'-6.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:48	05/29/25 13:24	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:48	05/29/25 13:24	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:48	05/29/25 13:24	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		05/29/25 09:48	05/29/25 13:24	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:48	05/29/25 13:24	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/29/25 09:48	05/29/25 13:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	05/29/25 09:48	05/29/25 13:24	1
1,4-Difluorobenzene (Surr)	103		70 - 130	05/29/25 09:48	05/29/25 13:24	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/29/25 13:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			05/29/25 22:22	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 *1	49.7		mg/Kg		05/28/25 16:26	05/29/25 22:22	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/28/25 16:26	05/29/25 22:22	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/28/25 16:26	05/29/25 22:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130	05/28/25 16:26	05/29/25 22:22	1
o-Terphenyl (Surr)	94		70 - 130	05/28/25 16:26	05/29/25 22:22	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-2 (6.0'-6.5')**

**Lab Sample ID: 820-19072-9**

Date Collected: 05/22/25 15:50  
 Date Received: 05/23/25 14:19  
 Sample Depth: - 6.0'-6.5

Matrix: Solid

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	854		10.0		mg/Kg			05/29/25 12:00	1

**Client Sample ID: DS-3 (6.0'-6.5')**

**Lab Sample ID: 820-19072-10**

Date Collected: 05/22/25 16:10  
 Date Received: 05/23/25 14:19  
 Sample Depth: - 6.0'-6.5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
m,p-Xylenes	<0.00397	U	0.00397		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
Xylenes, Total	<0.00397	U	0.00397		mg/Kg		05/29/25 09:48	05/29/25 13:45	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	100		70 - 130				05/29/25 09:48	05/29/25 13:45	1
1,4-Difluorobenzene (Surr)	93		70 - 130				05/29/25 09:48	05/29/25 13:45	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397		mg/Kg			05/29/25 13:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/29/25 22:38	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 *1	49.8		mg/Kg		05/28/25 16:26	05/29/25 22:38	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/29/25 22:38	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/29/25 22:38	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
1-Chlorooctane (Surr)	91		70 - 130				05/28/25 16:26	05/29/25 22:38	1
o-Terphenyl (Surr)	84		70 - 130				05/28/25 16:26	05/29/25 22:38	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	270		10.1		mg/Kg			05/29/25 12:07	1

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-1 (8.0'-8.5')**

**Lab Sample ID: 820-19072-11**

Date Collected: 05/22/25 16:30

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 8.0'-8.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 14:05	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 14:05	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 14:05	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		05/29/25 09:48	05/29/25 14:05	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:48	05/29/25 14:05	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/29/25 09:48	05/29/25 14:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	05/29/25 09:48	05/29/25 14:05	1
1,4-Difluorobenzene (Surr)	76		70 - 130	05/29/25 09:48	05/29/25 14:05	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/29/25 14:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			05/29/25 22:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9		mg/Kg		05/28/25 16:26	05/29/25 22:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		05/28/25 16:26	05/29/25 22:54	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		05/28/25 16:26	05/29/25 22:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	89		70 - 130	05/28/25 16:26	05/29/25 22:54	1
o-Terphenyl (Surr)	84		70 - 130	05/28/25 16:26	05/29/25 22:54	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1240		9.94		mg/Kg			05/29/25 12:14	1

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19072-1  
SDG: Eddy County

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
820-19072-1	DS-1 (0.5'-1.0')	98	90
820-19072-2	DS-1 (3.5'-4.0')	98	101
820-19072-3	DS-2 (0.5'-1.0')	89	94
820-19072-4	DS-2 (3.5'-4.0')	95	96
820-19072-5	DS-3 (0.5'-1.0')	105	98
820-19072-6	DS-3 (3.5'-4.0')	96	85
820-19072-6 MS	DS-3 (3.5'-4.0')	112	94
820-19072-6 MSD	DS-3 (3.5'-4.0')	98	111
820-19072-7	DS-4 (0.5'-1.0')	103	96
820-19072-8	DS-4 (3.5'-4.0')	95	85
820-19072-9	DS-2 (6.0'-6.5')	92	103
820-19072-10	DS-3 (6.0'-6.5')	100	93
820-19072-11	DS-1 (8.0'-8.5')	96	76
880-58624-A-2-B MS	Matrix Spike	94	94
880-58624-A-2-C MSD	Matrix Spike Duplicate	101	99
LCS 880-111059/1-A	Lab Control Sample	95	95
LCS 880-111105/1-A	Lab Control Sample	108	94
LCSD 880-111059/2-A	Lab Control Sample Dup	96	102
LCSD 880-111105/2-A	Lab Control Sample Dup	98	106
MB 880-111059/5-A	Method Blank	130	87
MB 880-111105/5-A	Method Blank	91	92

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
820-19072-1	DS-1 (0.5'-1.0')	82	80
820-19072-2	DS-1 (3.5'-4.0')	82	77
820-19072-3	DS-2 (0.5'-1.0')	86	83
820-19072-4	DS-2 (3.5'-4.0')	84	79
820-19072-5	DS-3 (0.5'-1.0')	85	81
820-19072-6	DS-3 (3.5'-4.0')	95	89
820-19072-6 MS	DS-3 (3.5'-4.0')	91	79
820-19072-6 MSD	DS-3 (3.5'-4.0')	87	88
820-19072-7	DS-4 (0.5'-1.0')	96	91
820-19072-8	DS-4 (3.5'-4.0')	81	77
820-19072-9	DS-2 (6.0'-6.5')	96	94
820-19072-10	DS-3 (6.0'-6.5')	91	84
820-19072-11	DS-1 (8.0'-8.5')	89	84
890-8223-A-2-C MS	Matrix Spike	113	113
890-8223-A-2-D MSD	Matrix Spike Duplicate	126	112
LCS 880-110951/2-A	Lab Control Sample	81	88
LCS 880-111074/2-A	Lab Control Sample	121	135 S1+
LCSD 880-110951/3-A	Lab Control Sample Dup	99	91

Eurofins Lubbock

### Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

**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 880-111074/3-A	Lab Control Sample Dup	103	113
MB 880-110951/1-A	Method Blank	77	77
MB 880-111074/1-A	Method Blank	95	93

**Surrogate Legend**

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

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

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

Lab Sample ID: MB 880-111059/5-A  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 14:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 14:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 14:32	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/28/25 13:00	05/28/25 14:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/28/25 13:00	05/28/25 14:32	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/28/25 13:00	05/28/25 14:32	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	05/28/25 13:00	05/28/25 14:32	1
1,4-Difluorobenzene (Surr)	87		70 - 130	05/28/25 13:00	05/28/25 14:32	1

Lab Sample ID: LCS 880-111059/1-A  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1043		mg/Kg		104	70 - 130
Toluene	0.100	0.1029		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1206		mg/Kg		121	70 - 130
m,p-Xylenes	0.200	0.1944		mg/Kg		97	70 - 130
o-Xylene	0.100	0.1007		mg/Kg		101	70 - 130

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

Lab Sample ID: LCSD 880-111059/2-A  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1062		mg/Kg		106	70 - 130	2	35
Toluene	0.100	0.1015		mg/Kg		102	70 - 130	1	35
Ethylbenzene	0.100	0.1070		mg/Kg		107	70 - 130	12	35
m,p-Xylenes	0.200	0.1831		mg/Kg		92	70 - 130	6	35
o-Xylene	0.100	0.1158		mg/Kg		116	70 - 130	14	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 880-58624-A-2-B MS  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.08804		mg/Kg		88	70 - 130
Toluene	<0.00200	U	0.100	0.09944		mg/Kg		99	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

Lab Sample ID: 880-58624-A-2-B MS  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.09459		mg/Kg		95	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1874		mg/Kg		94	70 - 130
o-Xylene	<0.00200	U	0.100	0.1002		mg/Kg		100	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-58624-A-2-C MSD  
 Matrix: Solid  
 Analysis Batch: 111031

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Total/NA  
 Prep Batch: 111059

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.09239		mg/Kg		92	70 - 130	5	35
Toluene	<0.00200	U	0.100	0.09410		mg/Kg		94	70 - 130	6	35
Ethylbenzene	<0.00200	U	0.100	0.1011		mg/Kg		101	70 - 130	7	35
m,p-Xylenes	<0.00399	U	0.200	0.1902		mg/Kg		95	70 - 130	1	35
o-Xylene	<0.00200	U	0.100	0.1024		mg/Kg		102	70 - 130	2	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-111105/5-A  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:01	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:01	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:01	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/29/25 09:48	05/29/25 12:01	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:48	05/29/25 12:01	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/29/25 09:48	05/29/25 12:01	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	05/29/25 09:48	05/29/25 12:01	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/29/25 09:48	05/29/25 12:01	1

Lab Sample ID: LCS 880-111105/1-A  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1020		mg/Kg		102	70 - 130
Toluene	0.100	0.1054		mg/Kg		105	70 - 130
Ethylbenzene	0.100	0.1220		mg/Kg		122	70 - 130
m,p-Xylenes	0.200	0.2295		mg/Kg		115	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

Lab Sample ID: LCS 880-111105/1-A  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1144		mg/Kg		114	70 - 130
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>				
4-Bromofluorobenzene (Surr)	108		70 - 130				
1,4-Difluorobenzene (Surr)	94		70 - 130				

Lab Sample ID: LCSD 880-111105/2-A  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1038		mg/Kg		104	70 - 130	2	35
Toluene	0.100	0.09687		mg/Kg		97	70 - 130	8	35
Ethylbenzene	0.100	0.09994		mg/Kg		100	70 - 130	20	35
m,p-Xylenes	0.200	0.1910		mg/Kg		95	70 - 130	18	35
o-Xylene	0.100	0.09603		mg/Kg		96	70 - 130	17	35
<b>Surrogate</b>	<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>	<b>Limits</b>						
4-Bromofluorobenzene (Surr)	98		70 - 130						
1,4-Difluorobenzene (Surr)	106		70 - 130						

Lab Sample ID: 820-19072-6 MS  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: DS-3 (3.5'-4.0')  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09901		mg/Kg		99	70 - 130
Toluene	<0.00200	U	0.100	0.09155		mg/Kg		92	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1198		mg/Kg		120	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.2240		mg/Kg		112	70 - 130
o-Xylene	<0.00200	U	0.100	0.1120		mg/Kg		112	70 - 130
<b>Surrogate</b>	<b>MS %Recovery</b>	<b>MS Qualifier</b>	<b>Limits</b>						
4-Bromofluorobenzene (Surr)	112		70 - 130						
1,4-Difluorobenzene (Surr)	94		70 - 130						

Lab Sample ID: 820-19072-6 MSD  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: DS-3 (3.5'-4.0')  
 Prep Type: Total/NA  
 Prep Batch: 111105

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.1139		mg/Kg		114	70 - 130	14	35
Toluene	<0.00200	U	0.100	0.1019		mg/Kg		102	70 - 130	11	35
Ethylbenzene	<0.00200	U	0.100	0.1092		mg/Kg		109	70 - 130	9	35
m,p-Xylenes	<0.00399	U	0.200	0.2083		mg/Kg		104	70 - 130	7	35
o-Xylene	<0.00200	U	0.100	0.1039		mg/Kg		104	70 - 130	8	35

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

Lab Sample ID: 820-19072-6 MSD  
 Matrix: Solid  
 Analysis Batch: 111100

Client Sample ID: DS-3 (3.5'-4.0')  
 Prep Type: Total/NA  
 Prep Batch: 111105

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

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

Lab Sample ID: MB 880-110951/1-A  
 Matrix: Solid  
 Analysis Batch: 111033

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 110951

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		05/27/25 09:52	05/28/25 18:25	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/27/25 09:52	05/28/25 18:25	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/27/25 09:52	05/28/25 18:25	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	77		70 - 130	05/27/25 09:52	05/28/25 18:25	1
o-Terphenyl (Surr)	77		70 - 130	05/27/25 09:52	05/28/25 18:25	1

Lab Sample ID: LCS 880-110951/2-A  
 Matrix: Solid  
 Analysis Batch: 111033

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 110951

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	871.0		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)	1000	974.5		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	81		70 - 130
o-Terphenyl (Surr)	88		70 - 130

Lab Sample ID: LCSD 880-110951/3-A  
 Matrix: Solid  
 Analysis Batch: 111033

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 110951

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	863.7		mg/Kg		86	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	931.3		mg/Kg		93	70 - 130	5	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	99		70 - 130
o-Terphenyl (Surr)	91		70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

**Lab Sample ID: 890-8223-A-2-C MS**  
**Matrix: Solid**  
**Analysis Batch: 111033**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 110951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1000	656.5	F1	mg/Kg		64	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	751.6		mg/Kg		75	70 - 130
<b>MS MS</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>						
1-Chlorooctane (Surr)	113		70 - 130						
o-Terphenyl (Surr)	113		70 - 130						

**Lab Sample ID: 890-8223-A-2-D MSD**  
**Matrix: Solid**  
**Analysis Batch: 111033**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 110951**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F1	1000	680.4	F1	mg/Kg		66	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<50.0	U F1	1000	680.6	F1	mg/Kg		68	70 - 130	10	20
<b>MSD MSD</b>											
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>								
1-Chlorooctane (Surr)	126		70 - 130								
o-Terphenyl (Surr)	112		70 - 130								

**Lab Sample ID: MB 880-111074/1-A**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

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		05/28/25 16:26	05/29/25 20:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 20:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 20:10	1
<b>MB MB</b>									
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1-Chlorooctane (Surr)	95		70 - 130			05/28/25 16:26	05/29/25 20:10	1	
o-Terphenyl (Surr)	93		70 - 130			05/28/25 16:26	05/29/25 20:10	1	

**Lab Sample ID: LCS 880-111074/2-A**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1196		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1292		mg/Kg		129	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

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

**Lab Sample ID: LCS 880-111074/2-A**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	121		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

**Lab Sample ID: LCSD 880-111074/3-A**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	973.7	*1	mg/Kg		97	70 - 130	21	20	
Diesel Range Organics (Over C10-C28)	1000	1065		mg/Kg		107	70 - 130	19	20	

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	103		70 - 130
o-Terphenyl (Surr)	113		70 - 130

**Lab Sample ID: 820-19072-6 MS**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: DS-3 (3.5'-4.0')**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1 F1	995	653.6	F1	mg/Kg		66	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	671.6	F1	mg/Kg		67	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	91		70 - 130
o-Terphenyl (Surr)	79		70 - 130

**Lab Sample ID: 820-19072-6 MSD**  
**Matrix: Solid**  
**Analysis Batch: 111132**

**Client Sample ID: DS-3 (3.5'-4.0')**  
**Prep Type: Total/NA**  
**Prep Batch: 111074**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1 F1	995	765.2		mg/Kg		77	70 - 130	16
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	806.6		mg/Kg		81	70 - 130	18

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	87		70 - 130
o-Terphenyl (Surr)	88		70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-111071/1-A  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			05/29/25 08:27	1

Lab Sample ID: LCS 880-111071/2-A  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	253.1		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-111071/3-A  
 Matrix: Solid  
 Analysis Batch: 111079

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	252.5		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 820-19072-1 MS  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: DS-1 (0.5'-1.0')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	4970	F1	1250	6511	F1	mg/Kg		124	90 - 110

Lab Sample ID: 820-19072-1 MSD  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: DS-1 (0.5'-1.0')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	4970	F1	1250	6519	F1	mg/Kg		125	90 - 110	0	20

Lab Sample ID: 820-19072-11 MS  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: DS-1 (8.0'-8.5')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1240		249	1469	4	mg/Kg		92	90 - 110

Lab Sample ID: 820-19072-11 MSD  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: DS-1 (8.0'-8.5')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1240		249	1469	4	mg/Kg		92	90 - 110	0	20

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

## GC VOA

## Analysis Batch: 111031

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	8021B	111059
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	8021B	111059
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	8021B	111059
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	8021B	111059
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	8021B	111059
MB 880-111059/5-A	Method Blank	Total/NA	Solid	8021B	111059
LCS 880-111059/1-A	Lab Control Sample	Total/NA	Solid	8021B	111059
LCSD 880-111059/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111059
880-58624-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	111059
880-58624-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	111059

## Prep Batch: 111059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	5035	
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	5035	
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	5035	
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	5035	
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	5035	
MB 880-111059/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111059/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111059/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-58624-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
880-58624-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 111100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	8021B	111105
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	8021B	111105
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	8021B	111105
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	8021B	111105
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	8021B	111105
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	8021B	111105
MB 880-111105/5-A	Method Blank	Total/NA	Solid	8021B	111105
LCS 880-111105/1-A	Lab Control Sample	Total/NA	Solid	8021B	111105
LCSD 880-111105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111105
820-19072-6 MS	DS-3 (3.5'-4.0')	Total/NA	Solid	8021B	111105
820-19072-6 MSD	DS-3 (3.5'-4.0')	Total/NA	Solid	8021B	111105

## Prep Batch: 111105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	5035	
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	5035	
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	5035	
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	5035	
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	5035	
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	5035	
MB 880-111105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-19072-6 MS	DS-3 (3.5'-4.0')	Total/NA	Solid	5035	
820-19072-6 MSD	DS-3 (3.5'-4.0')	Total/NA	Solid	5035	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

## GC VOA

## Analysis Batch: 111116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	Total BTEX	
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	Total BTEX	
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	Total BTEX	
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	Total BTEX	
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	Total BTEX	
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	Total BTEX	
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 110951

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
MB 880-110951/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-110951/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-110951/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8223-A-2-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8223-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 111033

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	8015B NM	110951
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	8015B NM	110951
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	8015B NM	110951
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	8015B NM	110951
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	8015B NM	110951
MB 880-110951/1-A	Method Blank	Total/NA	Solid	8015B NM	110951
LCS 880-110951/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	110951
LCSD 880-110951/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	110951
890-8223-A-2-C MS	Matrix Spike	Total/NA	Solid	8015B NM	110951
890-8223-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	110951

## Prep Batch: 111074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	8015NM Prep	
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	8015NM Prep	
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	8015NM Prep	
MB 880-111074/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-111074/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-111074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

## GC Semi VOA (Continued)

## Prep Batch: 111074 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-6 MS	DS-3 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	
820-19072-6 MSD	DS-3 (3.5'-4.0')	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 111132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	8015B NM	111074
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	8015B NM	111074
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	8015B NM	111074
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	8015B NM	111074
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	8015B NM	111074
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	8015B NM	111074
MB 880-111074/1-A	Method Blank	Total/NA	Solid	8015B NM	111074
LCS 880-111074/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	111074
LCSD 880-111074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	111074
820-19072-6 MS	DS-3 (3.5'-4.0')	Total/NA	Solid	8015B NM	111074
820-19072-6 MSD	DS-3 (3.5'-4.0')	Total/NA	Solid	8015B NM	111074

## Analysis Batch: 111152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19072-2	DS-1 (3.5'-4.0')	Total/NA	Solid	8015 NM	
820-19072-3	DS-2 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19072-4	DS-2 (3.5'-4.0')	Total/NA	Solid	8015 NM	
820-19072-5	DS-3 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19072-6	DS-3 (3.5'-4.0')	Total/NA	Solid	8015 NM	
820-19072-7	DS-4 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19072-8	DS-4 (3.5'-4.0')	Total/NA	Solid	8015 NM	
820-19072-9	DS-2 (6.0'-6.5')	Total/NA	Solid	8015 NM	
820-19072-10	DS-3 (6.0'-6.5')	Total/NA	Solid	8015 NM	
820-19072-11	DS-1 (8.0'-8.5')	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 111071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19072-2	DS-1 (3.5'-4.0')	Soluble	Solid	DI Leach	
820-19072-3	DS-2 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19072-4	DS-2 (3.5'-4.0')	Soluble	Solid	DI Leach	
820-19072-5	DS-3 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19072-6	DS-3 (3.5'-4.0')	Soluble	Solid	DI Leach	
820-19072-7	DS-4 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19072-8	DS-4 (3.5'-4.0')	Soluble	Solid	DI Leach	
820-19072-9	DS-2 (6.0'-6.5')	Soluble	Solid	DI Leach	
820-19072-10	DS-3 (6.0'-6.5')	Soluble	Solid	DI Leach	
820-19072-11	DS-1 (8.0'-8.5')	Soluble	Solid	DI Leach	
MB 880-111071/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-111071/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-111071/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-19072-1 MS	DS-1 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19072-1 MSD	DS-1 (0.5'-1.0')	Soluble	Solid	DI Leach	

Eurofins Lubbock

### QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

#### HPLC/IC (Continued)

##### Leach Batch: 111071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-11 MS	DS-1 (8.0'-8.5')	Soluble	Solid	DI Leach	
820-19072-11 MSD	DS-1 (8.0'-8.5')	Soluble	Solid	DI Leach	

##### Analysis Batch: 111079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19072-1	DS-1 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-2	DS-1 (3.5'-4.0')	Soluble	Solid	300.0	111071
820-19072-3	DS-2 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-4	DS-2 (3.5'-4.0')	Soluble	Solid	300.0	111071
820-19072-5	DS-3 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-6	DS-3 (3.5'-4.0')	Soluble	Solid	300.0	111071
820-19072-7	DS-4 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-8	DS-4 (3.5'-4.0')	Soluble	Solid	300.0	111071
820-19072-9	DS-2 (6.0'-6.5')	Soluble	Solid	300.0	111071
820-19072-10	DS-3 (6.0'-6.5')	Soluble	Solid	300.0	111071
820-19072-11	DS-1 (8.0'-8.5')	Soluble	Solid	300.0	111071
MB 880-111071/1-A	Method Blank	Soluble	Solid	300.0	111071
LCS 880-111071/2-A	Lab Control Sample	Soluble	Solid	300.0	111071
LCSD 880-111071/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	111071
820-19072-1 MS	DS-1 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-1 MSD	DS-1 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19072-11 MS	DS-1 (8.0'-8.5')	Soluble	Solid	300.0	111071
820-19072-11 MSD	DS-1 (8.0'-8.5')	Soluble	Solid	300.0	111071

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-1 (0.5'-1.0')**

**Lab Sample ID: 820-19072-1**

Date Collected: 05/22/25 14:30

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	111059	05/28/25 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111031	05/28/25 16:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/28/25 16:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 00:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	110951	05/27/25 09:52	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111033	05/29/25 00:07	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		5			111079	05/29/25 09:17	CH	EET MID

**Client Sample ID: DS-1 (3.5'-4.0')**

**Lab Sample ID: 820-19072-2**

Date Collected: 05/22/25 14:40

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	111059	05/28/25 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111031	05/28/25 17:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/28/25 17:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 00:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	110951	05/27/25 09:52	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111033	05/29/25 00:22	TKC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		5			111079	05/29/25 09:38	CH	EET MID

**Client Sample ID: DS-2 (0.5'-1.0')**

**Lab Sample ID: 820-19072-3**

Date Collected: 05/22/25 14:50

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	111059	05/28/25 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111031	05/28/25 17:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/28/25 17:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 00:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	110951	05/27/25 09:52	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111033	05/29/25 00:38	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		20			111079	05/29/25 09:45	CH	EET MID

**Client Sample ID: DS-2 (3.5'-4.0')**

**Lab Sample ID: 820-19072-4**

Date Collected: 05/22/25 14:55

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	111059	05/28/25 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111031	05/28/25 17:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/28/25 17:44	SM	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-2 (3.5'-4.0')**

**Lab Sample ID: 820-19072-4**

Date Collected: 05/22/25 14:55

Matrix: Solid

Date Received: 05/23/25 14:19

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			11152	05/29/25 00:54	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	110951	05/27/25 09:52	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111033	05/29/25 00:54	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		5			111079	05/29/25 09:52	CH	EET MID

**Client Sample ID: DS-3 (0.5'-1.0')**

**Lab Sample ID: 820-19072-5**

Date Collected: 05/22/25 15:05

Matrix: Solid

Date Received: 05/23/25 14:19

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	111059	05/28/25 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111031	05/28/25 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/28/25 18:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 01:10	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	110951	05/27/25 09:52	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111033	05/29/25 01:10	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		20			111079	05/29/25 09:59	CH	EET MID

**Client Sample ID: DS-3 (3.5'-4.0')**

**Lab Sample ID: 820-19072-6**

Date Collected: 05/22/25 15:10

Matrix: Solid

Date Received: 05/23/25 14:19

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	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 12:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 12:22	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 20:59	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 20:59	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 11:39	CH	EET MID

**Client Sample ID: DS-4 (0.5'-1.0')**

**Lab Sample ID: 820-19072-7**

Date Collected: 05/22/25 15:20

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 12:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 12:43	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 21:49	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 21:49	TKC	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-4 (0.5'-1.0')**

**Lab Sample ID: 820-19072-7**

Date Collected: 05/22/25 15:20

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.01 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		5			111079	05/29/25 11:46	CH	EET MID

**Client Sample ID: DS-4 (3.5'-4.0')**

**Lab Sample ID: 820-19072-8**

Date Collected: 05/22/25 15:30

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 13:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 13:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 22:05	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 22:05	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 11:53	CH	EET MID

**Client Sample ID: DS-2 (6.0'-6.5')**

**Lab Sample ID: 820-19072-9**

Date Collected: 05/22/25 15:50

Matrix: Solid

Date Received: 05/23/25 14:19

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	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 13:24	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 13:24	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 22:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 22:22	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 12:00	CH	EET MID

**Client Sample ID: DS-3 (6.0'-6.5')**

**Lab Sample ID: 820-19072-10**

Date Collected: 05/22/25 16:10

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 13:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 13:45	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 22:38	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 22:38	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 12:07	CH	EET MID

Eurofins Lubbock

# Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
 SDG: Eddy County

**Client Sample ID: DS-1 (8.0'-8.5')**

**Lab Sample ID: 820-19072-11**

**Date Collected: 05/22/25 16:30**

**Matrix: Solid**

**Date Received: 05/23/25 14:19**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	111105	05/29/25 09:48	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111100	05/29/25 14:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111116	05/29/25 14:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			111152	05/29/25 22:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 22:54	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 12:14	CH	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

#### Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

# Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19072-1  
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-19072-1	DS-1 (0.5'-1.0')	Solid	05/22/25 14:30	05/23/25 14:19	- 0.5'-1.0
820-19072-2	DS-1 (3.5'-4.0')	Solid	05/22/25 14:40	05/23/25 14:19	- 3.5'-4.0
820-19072-3	DS-2 (0.5'-1.0')	Solid	05/22/25 14:50	05/23/25 14:19	- 0.5'-1.0
820-19072-4	DS-2 (3.5'-4.0')	Solid	05/22/25 14:55	05/23/25 14:19	- 3.5'-4.0
820-19072-5	DS-3 (0.5'-1.0')	Solid	05/22/25 15:05	05/23/25 14:19	- 0.5'-1.0
820-19072-6	DS-3 (3.5'-4.0')	Solid	05/22/25 15:10	05/23/25 14:19	- 3.5'-4.0
820-19072-7	DS-4 (0.5'-1.0')	Solid	05/22/25 15:20	05/23/25 14:19	- 0.5'-1.0
820-19072-8	DS-4 (3.5'-4.0')	Solid	05/22/25 15:30	05/23/25 14:19	- 3.5'-4.0
820-19072-9	DS-2 (6.0'-6.5')	Solid	05/22/25 15:50	05/23/25 14:19	- 6.0'-6.5
820-19072-10	DS-3 (6.0'-6.5')	Solid	05/22/25 16:10	05/23/25 14:19	- 6.0'-6.5
820-19072-11	DS-1 (8.0'-8.5')	Solid	05/22/25 16:30	05/23/25 14:19	- 8.0'-8.5

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

Loc: 820  
19072



4145 Greenbriar Dr., Stafford, TX 77477  
(281) 240-4200



820-19072 Chain of Custody

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Terracon		BILL TO:		ANALYSIS REQUEST							
Project Manager: Chuck Smith		P.O. #: WO 21550556									
Address: 5847 50th Street		Company: Devon Energy									
City: Lubbock		Attn: Jim Raley									
Phone #: 806-300-0140		Address: 205 E. Bender Rd.									
Project #: KH247057		City: Carlsbad									
Project Name: Snapping 12 CTB 2 / Incident No. nAPP2512029165		State: NM									
Project Location: Eddy County		Phone #: 575-689-7597									
Sampler Name: Chuck Smith		Fax #:									
FOR LAB USE ONLY	Sample I.D.	Depth (ft)	(G)RAB OR (COMP.# CONTAINERS	MATRIX	ACID/BASE:	PRESEV.	DATE	TIME	TPH Extended 8015	Chloride (EPA Method 300.0)	BTEX (EPA Method 8021B)
	DS-1 (0.5'-1.0')	0.5'-1.0'	1	WASTEWATER		ICE / COOL	5-22-25	14:30	X	X	X
	DS-1 (3.5'-4.0')	3.5'-4.0'	1	SOIL			5-22-25	14:40	X	X	X
	DS-2 (0.5'-1.0')	0.5'-1.0'	1	SLUDGE			5-22-25	14:50	X	X	X
	DS-2 (3.5'-4.0')	3.5'-4.0'	1	OIL			5-22-25	14:55	X	X	X
	DS-3 (0.5'-1.0')	0.5'-1.0'	1	GROUNDWATER			5-22-25	15:05	X	X	X
	DS-3 (3.5'-4.0')	3.5'-4.0'	1	OTHER :			5-22-25	15:10	X	X	X
	DS-4 (0.5'-1.0')	0.5'-1.0'	1	OTHER :			5-22-25	15:20	X	X	X
	DS-4 (3.5'-4.0')	3.5'-4.0'	1	OTHER :			5-22-25	15:30	X	X	X
	DS-2 (6.0'-6.5')	6.0'-6.5'	1	OTHER :			5-22-25	15:50	X	X	X
	DS-3 (6.0'-6.5')	6.0'-6.5'	1	OTHER :			5-22-25	16:10	X	X	X
	DS-1 (8.0'-8.5')	8.0'-8.5'	1	OTHER :			5-22-25	16:30	X	X	X
Relinquished By:	<i>Ally R. M...</i>	Date: 5-23-25	Received By: <i>Joyman...</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No Add'l Phone #:							
Relinquished By:		Time: 14:19	Received By:	All Results are emailed. Please provide Email address: Zach.M.Heller@terracon.com chuck.smith@terracon.com; Joseph.guesnier@terracon.com							
Delivered By: (Circle One)	- Bus - Other: IR-1 to 3 ICE	Observed Temp. °C: 2.7 Corrected Temp. °C: 3.1	Checked By: (Initials) <i>JS</i>	REMARKS:							
Sampler - UPS			Sample Condition	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>							
			Cool <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Bacteria (only) Sample Condition							
			Inject <input type="checkbox"/> Yes <input type="checkbox"/> No	Cool <input type="checkbox"/> Yes <input type="checkbox"/> No							
				Thermometer ID #113							
				Correction Factor -0.5°C							

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19072-1

SDG Number: Eddy County

**Login Number: 19072**

**List Number: 1**

**Creator: Pena, Yazmeane**

**List Source: Eurofins Lubbock**

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	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19072-1

SDG Number: Eddy County

**Login Number: 19072**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**

**List Creation: 05/28/25 04:05 PM**

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	

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



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 6/4/2025 2:27:06 PM Revision 1

## JOB DESCRIPTION

Snapping 12 CTB 2  
 Eddy County

## JOB NUMBER

820-19073-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
6/4/2025 2:27:06 PM  
Revision 1

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Laboratory Job ID: 820-19073-1  
SDG: Eddy County

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	13
QC Sample Results . . . . .	14
QC Association Summary . . . . .	20
Lab Chronicle . . . . .	23
Certification Summary . . . . .	26
Method Summary . . . . .	27
Sample Summary . . . . .	28
Chain of Custody . . . . .	29
Receipt Checklists . . . . .	30

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
SDG: Eddy County

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-19073-1

**Job ID: 820-19073-1**

**Eurofins Lubbock**

### Job Narrative 820-19073-1

#### REVISION

The report being provided is a revision of the original report sent on 5/30/2025. The report (revision 1) is being revised due to Total TPH missing on final report.

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

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

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

#### **Receipt**

The samples were received on 5/23/2025 2:19 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.1°C.

#### **Receipt Exceptions**

The COC says for the TPH method, 'TPH Extended 8015', and so I wasn't sure if I still do the normal TX\_1005. I went ahead and added both. DS-6 (0.5'-1.0') (820-19073-1), DS-6 (2.5'-3.0') (820-19073-2), DS-7 (0.5'-1.0') (820-19073-3), DS-7 (2.5'-3.0') (820-19073-4), DS-5 (0.5'-1.0') (820-19073-5), DS-5 (2.5'-3.0') (820-19073-6), DS-8 (0.5'-1.0') (820-19073-7) and DS-8 (2.5'-3.0') (820-19073-8)

The following samples were received and analyzed from an unpreserved bulk soil jar: DS-6 (0.5'-1.0') (820-19073-1), DS-6 (2.5'-3.0') (820-19073-2), DS-7 (0.5'-1.0') (820-19073-3), DS-7 (2.5'-3.0') (820-19073-4), DS-5 (0.5'-1.0') (820-19073-5), DS-5 (2.5'-3.0') (820-19073-6), DS-8 (0.5'-1.0') (820-19073-7) and DS-8 (2.5'-3.0') (820-19073-8)

#### **GC VOA**

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCS 880-111074/2-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-111074 and analytical batch 880-111132 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD\_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-111074 and analytical batch 880-111132 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

#### **HPLC/IC**

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

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19073-1  
SDG: Eddy County

Client Sample ID: DS-6 (0.5'-1.0')

Lab Sample ID: 820-19073-1

Date Collected: 05/22/25 12:40

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

## 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		05/29/25 09:51	05/29/25 12:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:32	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		05/29/25 09:51	05/29/25 12:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		05/29/25 09:51	05/29/25 12:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	05/29/25 09:51	05/29/25 12:32	1
1,4-Difluorobenzene (Surr)	71		70 - 130	05/29/25 09:51	05/29/25 12:32	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			05/29/25 12:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/29/25 23:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:09	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	81		70 - 130	05/28/25 16:26	05/29/25 23:09	1
o-Terphenyl (Surr)	77		70 - 130	05/28/25 16:26	05/29/25 23:09	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.3		9.92		mg/Kg			05/29/25 12:36	1

Client Sample ID: DS-6 (2.5'-3.0')

Lab Sample ID: 820-19073-2

Date Collected: 05/22/25 12:45

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:51	05/29/25 12:52	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:51	05/29/25 12:52	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:51	05/29/25 12:52	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		05/29/25 09:51	05/29/25 12:52	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/29/25 09:51	05/29/25 12:52	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/29/25 09:51	05/29/25 12:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/29/25 09:51	05/29/25 12:52	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-6 (2.5'-3.0')**

**Lab Sample ID: 820-19073-2**

Date Collected: 05/22/25 12:45

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	77		70 - 130	05/29/25 09:51	05/29/25 12:52	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/29/25 12:52	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			05/29/25 23:26	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U *1	50.1		mg/Kg		05/28/25 16:26	05/29/25 23:26	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		05/28/25 16:26	05/29/25 23:26	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		05/28/25 16:26	05/29/25 23:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130	05/28/25 16:26	05/29/25 23:26	1
o-Terphenyl (Surr)	90		70 - 130	05/28/25 16:26	05/29/25 23:26	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	93.8		10.1		mg/Kg			05/29/25 12:43	1

**Client Sample ID: DS-7 (0.5'-1.0')**

**Lab Sample ID: 820-19073-3**

Date Collected: 05/22/25 13:15

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:51	05/29/25 13:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:51	05/29/25 13:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:51	05/29/25 13:13	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		05/29/25 09:51	05/29/25 13:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/29/25 09:51	05/29/25 13:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/29/25 09:51	05/29/25 13:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	05/29/25 09:51	05/29/25 13:13	1
1,4-Difluorobenzene (Surr)	75		70 - 130	05/29/25 09:51	05/29/25 13:13	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/29/25 13:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			05/29/25 23:41	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-7 (0.5'-1.0')**

**Lab Sample ID: 820-19073-3**

Date Collected: 05/22/25 13:15

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U *1	50.2		mg/Kg		05/28/25 16:26	05/29/25 23:41	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		05/28/25 16:26	05/29/25 23:41	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		05/28/25 16:26	05/29/25 23:41	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	93		70 - 130				05/28/25 16:26	05/29/25 23:41	1
o-Terphenyl (Surr)	89		70 - 130				05/28/25 16:26	05/29/25 23:41	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.4		10.0		mg/Kg			05/29/25 13:04	1

**Client Sample ID: DS-7 (2.5'-3.0')**

**Lab Sample ID: 820-19073-4**

Date Collected: 05/22/25 13:20

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/29/25 09:51	05/29/25 13:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130				05/29/25 09:51	05/29/25 13:33	1
1,4-Difluorobenzene (Surr)	74		70 - 130				05/29/25 09:51	05/29/25 13:33	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/29/25 13:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			05/29/25 23:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 23:57	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	96		70 - 130				05/28/25 16:26	05/29/25 23:57	1
o-Terphenyl (Surr)	91		70 - 130				05/28/25 16:26	05/29/25 23:57	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-7 (2.5'-3.0')**

**Lab Sample ID: 820-19073-4**

Date Collected: 05/22/25 13:20

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		10.1		mg/Kg			05/29/25 13:11	1

**Client Sample ID: DS-5 (0.5'-1.0')**

**Lab Sample ID: 820-19073-5**

Date Collected: 05/22/25 13:35

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		05/28/25 16:14	05/28/25 19:13	1
Toluene	<0.00199	U	0.00199		mg/Kg		05/28/25 16:14	05/28/25 19:13	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		05/28/25 16:14	05/28/25 19:13	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		05/28/25 16:14	05/28/25 19:13	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		05/28/25 16:14	05/28/25 19:13	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		05/28/25 16:14	05/28/25 19:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	05/28/25 16:14	05/28/25 19:13	1
1,4-Difluorobenzene (Surr)	92		70 - 130	05/28/25 16:14	05/28/25 19:13	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			05/28/25 19:13	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7		mg/Kg			05/30/25 00:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U *1	49.7		mg/Kg		05/28/25 16:26	05/30/25 00:29	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7		mg/Kg		05/28/25 16:26	05/30/25 00:29	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7		mg/Kg		05/28/25 16:26	05/30/25 00:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	78		70 - 130	05/28/25 16:26	05/30/25 00:29	1
o-Terphenyl (Surr)	76		70 - 130	05/28/25 16:26	05/30/25 00:29	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	456		9.96		mg/Kg			05/29/25 13:18	1

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19073-1  
SDG: Eddy County

Client Sample ID: DS-5 (2.5'-3.0')

Lab Sample ID: 820-19073-6

Date Collected: 05/22/25 13:50

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		05/28/25 16:14	05/28/25 19:33	1
Toluene	<0.00201	U	0.00201		mg/Kg		05/28/25 16:14	05/28/25 19:33	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		05/28/25 16:14	05/28/25 19:33	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		05/28/25 16:14	05/28/25 19:33	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		05/28/25 16:14	05/28/25 19:33	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		05/28/25 16:14	05/28/25 19:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	05/28/25 16:14	05/28/25 19:33	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/28/25 16:14	05/28/25 19:33	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			05/28/25 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			05/30/25 00:46	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U *1	50.2		mg/Kg		05/28/25 16:26	05/30/25 00:46	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		05/28/25 16:26	05/30/25 00:46	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		05/28/25 16:26	05/30/25 00:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	94		70 - 130	05/28/25 16:26	05/30/25 00:46	1
o-Terphenyl (Surr)	87		70 - 130	05/28/25 16:26	05/30/25 00:46	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		9.92		mg/Kg			05/29/25 13:25	1

Client Sample ID: DS-8 (0.5'-1.0')

Lab Sample ID: 820-19073-7

Date Collected: 05/22/25 14:00

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 0.5'-1.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		05/28/25 16:14	05/28/25 19:54	1
Toluene	<0.00202	U	0.00202		mg/Kg		05/28/25 16:14	05/28/25 19:54	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		05/28/25 16:14	05/28/25 19:54	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		05/28/25 16:14	05/28/25 19:54	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		05/28/25 16:14	05/28/25 19:54	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		05/28/25 16:14	05/28/25 19:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	05/28/25 16:14	05/28/25 19:54	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-8 (0.5'-1.0')**  
 Date Collected: 05/22/25 14:00  
 Date Received: 05/23/25 14:19  
 Sample Depth: - 0.5'-1.0

**Lab Sample ID: 820-19073-7**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	92		70 - 130	05/28/25 16:14	05/28/25 19:54	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			05/28/25 19:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/30/25 01:02	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 *1	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130	05/28/25 16:26	05/30/25 01:02	1
o-Terphenyl (Surr)	91		70 - 130	05/28/25 16:26	05/30/25 01:02	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	312		10.1		mg/Kg			05/29/25 13:33	1

**Client Sample ID: DS-8 (2.5'-3.0')**

**Lab Sample ID: 820-19073-8**  
 Matrix: Solid

Date Collected: 05/22/25 14:10  
 Date Received: 05/23/25 14:19  
 Sample Depth: - 2.5'-3.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		05/28/25 16:14	05/28/25 20:14	1
Toluene	<0.00198	U	0.00198		mg/Kg		05/28/25 16:14	05/28/25 20:14	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		05/28/25 16:14	05/28/25 20:14	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		05/28/25 16:14	05/28/25 20:14	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		05/28/25 16:14	05/28/25 20:14	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		05/28/25 16:14	05/28/25 20:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	05/28/25 16:14	05/28/25 20:14	1
1,4-Difluorobenzene (Surr)	96		70 - 130	05/28/25 16:14	05/28/25 20:14	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			05/28/25 20:14	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			05/30/25 01:19	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-8 (2.5'-3.0')**

**Lab Sample ID: 820-19073-8**

Date Collected: 05/22/25 14:10

Matrix: Solid

Date Received: 05/23/25 14:19

Sample Depth: - 2.5'-3.0

**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 *1	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:19	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		05/28/25 16:26	05/30/25 01:19	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	83		70 - 130	05/28/25 16:26	05/30/25 01:19	1
o-Terphenyl (Surr)	78		70 - 130	05/28/25 16:26	05/30/25 01:19	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	129		10.1		mg/Kg			05/29/25 13:40	1

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19073-1  
SDG: Eddy County

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
820-19073-1	DS-6 (0.5'-1.0')	102	71
820-19073-1 MS	DS-6 (0.5'-1.0')	108	87
820-19073-1 MSD	DS-6 (0.5'-1.0')	98	81
820-19073-2	DS-6 (2.5'-3.0')	104	77
820-19073-3	DS-7 (0.5'-1.0')	97	75
820-19073-4	DS-7 (2.5'-3.0')	99	74
820-19073-5	DS-5 (0.5'-1.0')	112	92
820-19073-5 MS	DS-5 (0.5'-1.0')	106	99
820-19073-5 MSD	DS-5 (0.5'-1.0')	100	104
820-19073-6	DS-5 (2.5'-3.0')	105	96
820-19073-7	DS-8 (0.5'-1.0')	108	92
820-19073-8	DS-8 (2.5'-3.0')	106	96
LCS 880-111073/1-A	Lab Control Sample	100	102
LCS 880-111106/1-A	Lab Control Sample	97	83
LCSD 880-111073/2-A	Lab Control Sample Dup	99	99
LCSD 880-111106/2-A	Lab Control Sample Dup	103	81
MB 880-111073/5-A	Method Blank	104	91
MB 880-111106/5-A	Method Blank	100	71

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
820-19072-A-6-E MS	Matrix Spike	91	79
820-19072-A-6-F MSD	Matrix Spike Duplicate	87	88
820-19073-1	DS-6 (0.5'-1.0')	81	77
820-19073-2	DS-6 (2.5'-3.0')	97	90
820-19073-3	DS-7 (0.5'-1.0')	93	89
820-19073-4	DS-7 (2.5'-3.0')	96	91
820-19073-5	DS-5 (0.5'-1.0')	78	76
820-19073-6	DS-5 (2.5'-3.0')	94	87
820-19073-7	DS-8 (0.5'-1.0')	97	91
820-19073-8	DS-8 (2.5'-3.0')	83	78
LCS 880-111074/2-A	Lab Control Sample	121	135 S1+
LCSD 880-111074/3-A	Lab Control Sample Dup	103	113
MB 880-111074/1-A	Method Blank	95	93

## Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

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

Lab Sample ID: MB 880-111073/5-A  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/28/25 16:14	05/28/25 18:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/28/25 16:14	05/28/25 18:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/28/25 16:14	05/28/25 18:51	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/28/25 16:14	05/28/25 18:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/28/25 16:14	05/28/25 18:51	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/28/25 16:14	05/28/25 18:51	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	05/28/25 16:14	05/28/25 18:51	1
1,4-Difluorobenzene (Surr)	91		70 - 130	05/28/25 16:14	05/28/25 18:51	1

Lab Sample ID: LCS 880-111073/1-A  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1074		mg/Kg		107	70 - 130
Toluene	0.100	0.09410		mg/Kg		94	70 - 130
Ethylbenzene	0.100	0.09662		mg/Kg		97	70 - 130
m,p-Xylenes	0.200	0.1955		mg/Kg		98	70 - 130
o-Xylene	0.100	0.09743		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: LCSD 880-111073/2-A  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1093		mg/Kg		109	70 - 130	2	35
Toluene	0.100	0.09600		mg/Kg		96	70 - 130	2	35
Ethylbenzene	0.100	0.09851		mg/Kg		99	70 - 130	2	35
m,p-Xylenes	0.200	0.1999		mg/Kg		100	70 - 130	2	35
o-Xylene	0.100	0.09967		mg/Kg		100	70 - 130	2	35

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

Lab Sample ID: 820-19073-5 MS  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: DS-5 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U	0.0992	0.1093		mg/Kg		110	70 - 130
Toluene	<0.00199	U	0.0992	0.09568		mg/Kg		96	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

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

Lab Sample ID: 820-19073-5 MS  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: DS-5 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.0992	0.09815		mg/Kg		99	70 - 130
m,p-Xylenes	<0.00398	U	0.198	0.1985		mg/Kg		100	70 - 130
o-Xylene	<0.00199	U	0.0992	0.09996		mg/Kg		101	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: 820-19073-5 MSD  
 Matrix: Solid  
 Analysis Batch: 111072

Client Sample ID: DS-5 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111073

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.1126		mg/Kg		112	70 - 130	3	35
Toluene	<0.00199	U	0.100	0.09656		mg/Kg		96	70 - 130	1	35
Ethylbenzene	<0.00199	U	0.100	0.09798		mg/Kg		98	70 - 130	0	35
m,p-Xylenes	<0.00398	U	0.200	0.1970		mg/Kg		98	70 - 130	1	35
o-Xylene	<0.00199	U	0.100	0.09913		mg/Kg		99	70 - 130	1	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: MB 880-111106/5-A  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:10	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		05/29/25 09:51	05/29/25 12:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		05/29/25 09:51	05/29/25 12:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		05/29/25 09:51	05/29/25 12:10	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	05/29/25 09:51	05/29/25 12:10	1
1,4-Difluorobenzene (Surr)	71		70 - 130	05/29/25 09:51	05/29/25 12:10	1

Lab Sample ID: LCS 880-111106/1-A  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1068		mg/Kg		107	70 - 130
Toluene	0.100	0.09937		mg/Kg		99	70 - 130
Ethylbenzene	0.100	0.1001		mg/Kg		100	70 - 130
m,p-Xylenes	0.200	0.1998		mg/Kg		100	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

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

Lab Sample ID: LCS 880-111106/1-A  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.1018		mg/Kg		102	70 - 130
<b>Surrogate</b>		<b>LCS %Recovery</b>	<b>LCS Qualifier</b>				<b>Limits</b>
4-Bromofluorobenzene (Surr)		97					70 - 130
1,4-Difluorobenzene (Surr)		83					70 - 130

Lab Sample ID: LCSD 880-111106/2-A  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1092		mg/Kg		109	70 - 130	2	35
Toluene	0.100	0.1033		mg/Kg		103	70 - 130	4	35
Ethylbenzene	0.100	0.1049		mg/Kg		105	70 - 130	5	35
m,p-Xylenes	0.200	0.2082		mg/Kg		104	70 - 130	4	35
o-Xylene	0.100	0.1047		mg/Kg		105	70 - 130	3	35
<b>Surrogate</b>		<b>LCSD %Recovery</b>	<b>LCSD Qualifier</b>				<b>Limits</b>		
4-Bromofluorobenzene (Surr)		103					70 - 130		
1,4-Difluorobenzene (Surr)		81					70 - 130		

Lab Sample ID: 820-19073-1 MS  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: DS-6 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1084		mg/Kg		108	70 - 130
Toluene	<0.00200	U	0.100	0.1021		mg/Kg		102	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1041		mg/Kg		104	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.2100		mg/Kg		105	70 - 130
o-Xylene	<0.00200	U	0.100	0.1068		mg/Kg		107	70 - 130
<b>Surrogate</b>		<b>MS %Recovery</b>	<b>MS Qualifier</b>						<b>Limits</b>
4-Bromofluorobenzene (Surr)		108							70 - 130
1,4-Difluorobenzene (Surr)		87							70 - 130

Lab Sample ID: 820-19073-1 MSD  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: DS-6 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111106

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.1048		mg/Kg		105	70 - 130	3	35
Toluene	<0.00200	U	0.100	0.09974		mg/Kg		100	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.1002		mg/Kg		100	70 - 130	4	35
m,p-Xylenes	<0.00399	U	0.200	0.2004		mg/Kg		100	70 - 130	5	35
o-Xylene	<0.00200	U	0.100	0.1015		mg/Kg		102	70 - 130	5	35

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

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

Lab Sample ID: 820-19073-1 MSD  
 Matrix: Solid  
 Analysis Batch: 111099

Client Sample ID: DS-6 (0.5'-1.0')  
 Prep Type: Total/NA  
 Prep Batch: 111106

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

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

Lab Sample ID: MB 880-111074/1-A  
 Matrix: Solid  
 Analysis Batch: 111132

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 111074

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		05/28/25 16:26	05/29/25 20:10	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 20:10	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		05/28/25 16:26	05/29/25 20:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	95		70 - 130	05/28/25 16:26	05/29/25 20:10	1
o-Terphenyl (Surr)	93		70 - 130	05/28/25 16:26	05/29/25 20:10	1

Lab Sample ID: LCS 880-111074/2-A  
 Matrix: Solid  
 Analysis Batch: 111132

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 111074

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1196		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1292		mg/Kg		129	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane (Surr)	121		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

Lab Sample ID: LCSD 880-111074/3-A  
 Matrix: Solid  
 Analysis Batch: 111132

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 111074

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	973.7	*1	mg/Kg		97	70 - 130	21	20
Diesel Range Organics (Over C10-C28)	1000	1065		mg/Kg		107	70 - 130	19	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane (Surr)	103		70 - 130
o-Terphenyl (Surr)	113		70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

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

Lab Sample ID: 820-19072-A-6-E MS  
 Matrix: Solid  
 Analysis Batch: 111132

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 111074

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F1 *1	995	653.6	F1	mg/Kg		66		70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	671.6	F1	mg/Kg		67		70 - 130
Surrogate	MS	MS								
	%Recovery	Qualifier	Limits							
1-Chlorooctane (Surr)	91		70 - 130							
o-Terphenyl (Surr)	79		70 - 130							

Lab Sample ID: 820-19072-A-6-F MSD  
 Matrix: Solid  
 Analysis Batch: 111132

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Total/NA  
 Prep Batch: 111074

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F1 *1	995	765.2		mg/Kg		77		70 - 130	16		20
Diesel Range Organics (Over C10-C28)	<50.1	U F1	995	806.6		mg/Kg		81		70 - 130	18		20
Surrogate	MSD	MSD											
	%Recovery	Qualifier	Limits										
1-Chlorooctane (Surr)	87		70 - 130										
o-Terphenyl (Surr)	88		70 - 130										

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-111071/1-A  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			05/29/25 08:27	1

Lab Sample ID: LCS 880-111071/2-A  
 Matrix: Solid  
 Analysis Batch: 111079

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec	Limits
Chloride	250	253.1		mg/Kg		101		90 - 110

Lab Sample ID: LCSD 880-111071/3-A  
 Matrix: Solid  
 Analysis Batch: 111079

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

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD	Limit
Chloride	250	252.5		mg/Kg		101		90 - 110	0		20

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: 820-19072-A-11-B MS**  
**Matrix: Solid**  
**Analysis Batch: 111079**

**Client Sample ID: Matrix Spike**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1240		249	1469	4	mg/Kg		92	90 - 110

**Lab Sample ID: 820-19072-A-11-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 111079**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1240		249	1469	4	mg/Kg		92	90 - 110	0	20

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

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-19073-1  
SDG: Eddy County

## GC VOA

## Analysis Batch: 111072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	8021B	111073
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	8021B	111073
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	8021B	111073
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	8021B	111073
MB 880-111073/5-A	Method Blank	Total/NA	Solid	8021B	111073
LCS 880-111073/1-A	Lab Control Sample	Total/NA	Solid	8021B	111073
LCSD 880-111073/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111073
820-19073-5 MS	DS-5 (0.5'-1.0')	Total/NA	Solid	8021B	111073
820-19073-5 MSD	DS-5 (0.5'-1.0')	Total/NA	Solid	8021B	111073

## Prep Batch: 111073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	5035	
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	5035	
MB 880-111073/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111073/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111073/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-19073-5 MS	DS-5 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-5 MSD	DS-5 (0.5'-1.0')	Total/NA	Solid	5035	

## Analysis Batch: 111099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	8021B	111106
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	8021B	111106
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	8021B	111106
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	8021B	111106
MB 880-111106/5-A	Method Blank	Total/NA	Solid	8021B	111106
LCS 880-111106/1-A	Lab Control Sample	Total/NA	Solid	8021B	111106
LCSD 880-111106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	111106
820-19073-1 MS	DS-6 (0.5'-1.0')	Total/NA	Solid	8021B	111106
820-19073-1 MSD	DS-6 (0.5'-1.0')	Total/NA	Solid	8021B	111106

## Prep Batch: 111106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	5035	
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	5035	
MB 880-111106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-111106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-111106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-19073-1 MS	DS-6 (0.5'-1.0')	Total/NA	Solid	5035	
820-19073-1 MSD	DS-6 (0.5'-1.0')	Total/NA	Solid	5035	

## Analysis Batch: 111253

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	Total BTEX	
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	Total BTEX	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

## GC VOA (Continued)

## Analysis Batch: 111253 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	Total BTEX	
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	Total BTEX	
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	Total BTEX	
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 111074

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	8015NM Prep	
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	8015NM Prep	
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	8015NM Prep	
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	8015NM Prep	
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	8015NM Prep	
MB 880-111074/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-111074/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-111074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-19072-A-6-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-19072-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 111132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	8015B NM	111074
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	8015B NM	111074
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	8015B NM	111074
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	8015B NM	111074
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	8015B NM	111074
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	8015B NM	111074
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	8015B NM	111074
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	8015B NM	111074
MB 880-111074/1-A	Method Blank	Total/NA	Solid	8015B NM	111074
LCS 880-111074/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	111074
LCSD 880-111074/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	111074
820-19072-A-6-E MS	Matrix Spike	Total/NA	Solid	8015B NM	111074
820-19072-A-6-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	111074

## Analysis Batch: 111497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19073-2	DS-6 (2.5'-3.0')	Total/NA	Solid	8015 NM	
820-19073-3	DS-7 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19073-4	DS-7 (2.5'-3.0')	Total/NA	Solid	8015 NM	
820-19073-5	DS-5 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19073-6	DS-5 (2.5'-3.0')	Total/NA	Solid	8015 NM	
820-19073-7	DS-8 (0.5'-1.0')	Total/NA	Solid	8015 NM	
820-19073-8	DS-8 (2.5'-3.0')	Total/NA	Solid	8015 NM	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

## HPLC/IC

## Leach Batch: 111071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19073-2	DS-6 (2.5'-3.0')	Soluble	Solid	DI Leach	
820-19073-3	DS-7 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19073-4	DS-7 (2.5'-3.0')	Soluble	Solid	DI Leach	
820-19073-5	DS-5 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19073-6	DS-5 (2.5'-3.0')	Soluble	Solid	DI Leach	
820-19073-7	DS-8 (0.5'-1.0')	Soluble	Solid	DI Leach	
820-19073-8	DS-8 (2.5'-3.0')	Soluble	Solid	DI Leach	
MB 880-111071/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-111071/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-111071/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-19072-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
820-19072-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 111079

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19073-1	DS-6 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19073-2	DS-6 (2.5'-3.0')	Soluble	Solid	300.0	111071
820-19073-3	DS-7 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19073-4	DS-7 (2.5'-3.0')	Soluble	Solid	300.0	111071
820-19073-5	DS-5 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19073-6	DS-5 (2.5'-3.0')	Soluble	Solid	300.0	111071
820-19073-7	DS-8 (0.5'-1.0')	Soluble	Solid	300.0	111071
820-19073-8	DS-8 (2.5'-3.0')	Soluble	Solid	300.0	111071
MB 880-111071/1-A	Method Blank	Soluble	Solid	300.0	111071
LCS 880-111071/2-A	Lab Control Sample	Soluble	Solid	300.0	111071
LCSD 880-111071/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	111071
820-19072-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	111071
820-19072-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	111071

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-6 (0.5'-1.0')**

**Lab Sample ID: 820-19073-1**

Date Collected: 05/22/25 12:40

Matrix: Solid

Date Received: 05/23/25 14:19

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	111106	05/29/25 09:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111099	05/29/25 12:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/29/25 12:32	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/29/25 23:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 23:09	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 12:36	CH	EET MID

**Client Sample ID: DS-6 (2.5'-3.0')**

**Lab Sample ID: 820-19073-2**

Date Collected: 05/22/25 12:45

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	111106	05/29/25 09:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111099	05/29/25 12:52	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/29/25 12:52	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/29/25 23:26	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 23:26	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 12:43	CH	EET MID

**Client Sample ID: DS-7 (0.5'-1.0')**

**Lab Sample ID: 820-19073-3**

Date Collected: 05/22/25 13:15

Matrix: Solid

Date Received: 05/23/25 14:19

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	111106	05/29/25 09:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111099	05/29/25 13:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/29/25 13:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/29/25 23:41	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 23:41	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:04	CH	EET MID

**Client Sample ID: DS-7 (2.5'-3.0')**

**Lab Sample ID: 820-19073-4**

Date Collected: 05/22/25 13:20

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	111106	05/29/25 09:51	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111099	05/29/25 13:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/29/25 13:33	SM	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-7 (2.5'-3.0')**

**Lab Sample ID: 820-19073-4**

Date Collected: 05/22/25 13:20

Matrix: Solid

Date Received: 05/23/25 14:19

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			111497	05/29/25 23:57	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/29/25 23:57	TKC	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:11	CH	EET MID

**Client Sample ID: DS-5 (0.5'-1.0')**

**Lab Sample ID: 820-19073-5**

Date Collected: 05/22/25 13:35

Matrix: Solid

Date Received: 05/23/25 14:19

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	111073	05/28/25 16:14	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111072	05/28/25 19:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/28/25 19:13	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/30/25 00:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/30/25 00:29	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:18	CH	EET MID

**Client Sample ID: DS-5 (2.5'-3.0')**

**Lab Sample ID: 820-19073-6**

Date Collected: 05/22/25 13:50

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	111073	05/28/25 16:14	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111072	05/28/25 19:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/28/25 19:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/30/25 00:46	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/30/25 00:46	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:25	CH	EET MID

**Client Sample ID: DS-8 (0.5'-1.0')**

**Lab Sample ID: 820-19073-7**

Date Collected: 05/22/25 14:00

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	111073	05/28/25 16:14	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111072	05/28/25 19:54	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/28/25 19:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/30/25 01:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/30/25 01:02	TKC	EET MID

Eurofins Lubbock

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
 SDG: Eddy County

**Client Sample ID: DS-8 (0.5'-1.0')**

**Lab Sample ID: 820-19073-7**

Date Collected: 05/22/25 14:00

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.97 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:33	CH	EET MID

**Client Sample ID: DS-8 (2.5'-3.0')**

**Lab Sample ID: 820-19073-8**

Date Collected: 05/22/25 14:10

Matrix: Solid

Date Received: 05/23/25 14:19

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	111073	05/28/25 16:14	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	111072	05/28/25 20:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			111253	05/28/25 20:14	SM	EET MID
Total/NA	Analysis	8015 NM		1			111497	05/30/25 01:19	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	111074	05/28/25 16:26	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	111132	05/30/25 01:19	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	111071	05/28/25 15:46	SA	EET MID
Soluble	Analysis	300.0		1			111079	05/29/25 13:40	CH	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
SDG: Eddy County

#### Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

# Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
SDG: Eddy County

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-19073-1  
SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-19073-1	DS-6 (0.5'-1.0')	Solid	05/22/25 12:40	05/23/25 14:19	- 0.5'-1.0
820-19073-2	DS-6 (2.5'-3.0')	Solid	05/22/25 12:45	05/23/25 14:19	- 2.5'-3.0
820-19073-3	DS-7 (0.5'-1.0')	Solid	05/22/25 13:15	05/23/25 14:19	- 0.5'-1.0
820-19073-4	DS-7 (2.5'-3.0')	Solid	05/22/25 13:20	05/23/25 14:19	- 2.5'-3.0
820-19073-5	DS-5 (0.5'-1.0')	Solid	05/22/25 13:35	05/23/25 14:19	- 0.5'-1.0
820-19073-6	DS-5 (2.5'-3.0')	Solid	05/22/25 13:50	05/23/25 14:19	- 2.5'-3.0
820-19073-7	DS-8 (0.5'-1.0')	Solid	05/22/25 14:00	05/23/25 14:19	- 0.5'-1.0
820-19073-8	DS-8 (2.5'-3.0')	Solid	05/22/25 14:10	05/23/25 14:19	- 2.5'-3.0

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

Loc: 820  
19073



4145 Greenbriar Dr., Stafford, TX 77477  
(281) 240-4200



820-19073 Chain of Custody

CHAIN-OF-CUSTODY AND ANALYSIS F

Company Name: Terracon		BILL TO:		ANALYSIS REQUEST									
Project Manager: Chuck Smith		P.O. #:	WO 21550556										
Address: 5847 50th Street		Company:	Devon Energy										
City: Lubbock		Attn:	Jim Raley										
Phone #: 806-300-0140		Address:	205 E. Bender Rd.										
Project #: KH247057		City:	Carlsbad										
Project Name: Snapping 12 CTB 2 / Incident No. nAPP2512029165		State:	NM										
Project Location: Eddy County		Phone #:	575-689-7597										
Sampler Name: Chuck Smith		Fax #:											
FOR LAB USE ONLY													
Lab I.D.	Sample I.D.	Depth (ft)	(G)RAB OR (COMP.	# CONTAINERS	MATRIX	ACID/BASE:	ICE / COOL	OTHER :	DATE	TIME	Chloride (EPA Method 300.0)	TPH Extended 8015	BTEX (EPA Method 8021B)
	D5-6 (0.5'-1.0')	0.5'-1.0'	G 1	1	GROUNDWATER		X		5/22/25	12:40	X	X	X
	D5-6 (2.5'-3.0')	2.5'-3.0'	G 1	1	WASTEWATER		X		5/22/25	12:45	X	X	X
	D5-7 (0.5'-1.0')	0.5'-1.0'	G 1	1	SOIL		X		5/22/25	13:15	X	X	X
	D5-7 (2.5'-3.0')	2.5'-3.0'	G 1	1	OIL		X		5/22/25	13:20	X	X	X
	D5-5 (0.5'-1.0')	0.5'-3.0'	G 1	1	SLUDGE		X		5/22/25	13:35	X	X	X
	D5-5 (2.5'-3.0')	2.5'-3.0'	G 1	1	OTHER :		X		5/22/25	13:50	X	X	X
	D5-8 (0.5'-1.0')	0.5'-3.0'	G 1	1	GROUNDWATER		X		5/22/25	19:00	X	X	X
	D5-8 (2.5'-3.0')	2.5'-3.0'	G 1	1	WASTEWATER		X		5/22/25	19:10	X	X	X

Relinquished By: *Zachary Mueller*  
Date: 5-23-25  
Time: 14:19

Received By: *Joyman Per*  
Date: 5-23-25  
Time: 14:19

Verbal Result:  Yes  No Add'l Phone #:  
All Results are emailed. Please provide Email address: *Zachary Mueller@terracon.com*  
*chuck.smith@terracon.com; Joseph.guesnier@terracon.com*

REMARKS:

Delivered By: (Circle One)  
Sampler - UPS - Bus - Other:

Sample Condition  
Cool Intact  
 Yes  No

Checked By: (Initials)  
*MS*

Turnaround Time: Standard  Rush

Thermometer ID #113  
Correction Factor -0.5°C

Bacteria (only) Sample Condition  
Cool Observed Temp. °C  
 Yes  No  
 Yes  No

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19073-1

SDG Number: Eddy County

**Login Number: 19073**

**List Number: 1**

**Creator: Pena, Yazmeane**

**List Source: Eurofins Lubbock**

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	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19073-1

SDG Number: Eddy County

**Login Number: 19073**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**

**List Creation: 05/28/25 04:05 PM**

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	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19073-1  
SDG Number: Eddy County

**Login Number: 19073**  
**List Number: 3**  
**Creator: Kramer, Jessica**

**List Source: Eurofins Midland**  
**List Creation: 06/04/25 02:11 PM**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	

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



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424  
 Generated 6/20/2025 4:34:00 PM

## JOB DESCRIPTION

Snapping 12  
 KH247057

## JOB NUMBER

820-19484-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
6/20/2025 4:34:00 PM

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Laboratory Job ID: 820-19484-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	8
QC Sample Results . . . . .	9
QC Association Summary . . . . .	13
Lab Chronicle . . . . .	15
Certification Summary . . . . .	16
Method Summary . . . . .	17
Sample Summary . . . . .	18
Chain of Custody . . . . .	19
Receipt Checklists . . . . .	22

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Job ID: 820-19484-1  
SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
U	Indicates the analyte was analyzed for but not detected.

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12

Job ID: 820-19484-1

**Job ID: 820-19484-1**

**Eurofins Lubbock**

## Job Narrative 820-19484-1

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

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

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

### Receipt

The samples were received on 6/19/2025 10:40 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C.

### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar:

DS-1 (9'-9.5') (820-19484-1) and DS-1 (10'-10.5') (820-19484-2)

### GC VOA

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

### Diesel Range Organics

Method 8015MOD\_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-112674 and analytical batch 880-112684 recovered outside control limits for the following analytes: Diesel Range Organics (Over C10-C28).

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-112650 and analytical batch 880-112653 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Lubbock



### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

**Client Sample ID: DS-1 (9'-9.5')**

**Lab Sample ID: 820-19484-1**

Date Collected: 06/13/25 14:30

Matrix: Solid

Date Received: 06/19/25 10:40

Sample Depth: 9 - 9.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/25 11:15	06/20/25 13:05	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/25 11:15	06/20/25 13:05	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/25 11:15	06/20/25 13:05	1
m,p-Xylenes	<0.00401	U	0.00401		mg/Kg		06/20/25 11:15	06/20/25 13:05	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/25 11:15	06/20/25 13:05	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		06/20/25 11:15	06/20/25 13:05	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	06/20/25 11:15	06/20/25 13:05	1
1,4-Difluorobenzene (Surr)	93		70 - 130	06/20/25 11:15	06/20/25 13:05	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			06/20/25 13:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			06/20/25 14:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/25 10:57	06/20/25 14:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U *1	50.0		mg/Kg		06/20/25 10:57	06/20/25 14:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/25 10:57	06/20/25 14:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	114		70 - 130	06/20/25 10:57	06/20/25 14:29	1
o-Terphenyl (Surr)	113		70 - 130	06/20/25 10:57	06/20/25 14:29	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1140		10.0		mg/Kg			06/20/25 13:15	1

**Client Sample ID: DS-1 (10-10.5')**

**Lab Sample ID: 820-19484-2**

Date Collected: 06/13/25 14:31

Matrix: Solid

Date Received: 06/19/25 10:40

Sample Depth: 10 - 10.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		06/20/25 11:16	06/20/25 13:25	1
Toluene	<0.00199	U	0.00199		mg/Kg		06/20/25 11:16	06/20/25 13:25	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		06/20/25 11:16	06/20/25 13:25	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		06/20/25 11:16	06/20/25 13:25	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		06/20/25 11:16	06/20/25 13:25	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		06/20/25 11:16	06/20/25 13:25	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	06/20/25 11:16	06/20/25 13:25	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

**Client Sample ID: DS-1 (10-10.5')**

**Lab Sample ID: 820-19484-2**

Date Collected: 06/13/25 14:31

Matrix: Solid

Date Received: 06/19/25 10:40

Sample Depth: 10 - 10.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	94		70 - 130	06/20/25 11:16	06/20/25 13:25	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			06/20/25 13:25	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			06/20/25 14:44	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		06/20/25 10:57	06/20/25 14:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U *1	49.8		mg/Kg		06/20/25 10:57	06/20/25 14:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		06/20/25 10:57	06/20/25 14:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	113		70 - 130	06/20/25 10:57	06/20/25 14:44	1
o-Terphenyl (Surr)	117		70 - 130	06/20/25 10:57	06/20/25 14:44	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1310		10.0		mg/Kg			06/20/25 13:23	1

### Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-19484-1	DS-1 (9'-9.5')	92	93
820-19484-2	DS-1 (10-10.5')	90	94
880-59525-A-7-D MS	Matrix Spike	99	98
880-59525-A-7-E MSD	Matrix Spike Duplicate	103	95
LCS 880-112668/1-A	Lab Control Sample	95	96
LCSD 880-112668/2-A	Lab Control Sample Dup	99	96
MB 880-112668/5-A	Method Blank	99	86

**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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
820-19484-1	DS-1 (9'-9.5')	114	113
820-19484-2	DS-1 (10-10.5')	113	117
820-19485-A-1-E MS	Matrix Spike	114	109
820-19485-A-1-F MSD	Matrix Spike Duplicate	113	108
LCS 880-112674/2-A	Lab Control Sample	130	125
LCSD 880-112674/3-A	Lab Control Sample Dup	74	73
MB 880-112674/1-A	Method Blank	116	118

**Surrogate Legend**  
 1CO = 1-Chlorooctane (Surr)  
 OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-112668/5-A  
 Matrix: Solid  
 Analysis Batch: 112656

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 112668

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		06/20/25 09:29	06/20/25 11:42	1
Toluene	<0.00200	U	0.00200		mg/Kg		06/20/25 09:29	06/20/25 11:42	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		06/20/25 09:29	06/20/25 11:42	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		06/20/25 09:29	06/20/25 11:42	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		06/20/25 09:29	06/20/25 11:42	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		06/20/25 09:29	06/20/25 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	06/20/25 09:29	06/20/25 11:42	1
1,4-Difluorobenzene (Surr)	86		70 - 130	06/20/25 09:29	06/20/25 11:42	1

Lab Sample ID: LCS 880-112668/1-A  
 Matrix: Solid  
 Analysis Batch: 112656

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 112668

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1089		mg/Kg		109	70 - 130
Toluene	0.100	0.09616		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09969		mg/Kg		100	70 - 130
m,p-Xylenes	0.200	0.2076		mg/Kg		104	70 - 130
o-Xylene	0.100	0.1022		mg/Kg		102	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: LCSD 880-112668/2-A  
 Matrix: Solid  
 Analysis Batch: 112656

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 112668

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1101		mg/Kg		110	70 - 130	1	35
Toluene	0.100	0.09947		mg/Kg		99	70 - 130	3	35
Ethylbenzene	0.100	0.1038		mg/Kg		104	70 - 130	4	35
m,p-Xylenes	0.200	0.2166		mg/Kg		108	70 - 130	4	35
o-Xylene	0.100	0.1069		mg/Kg		107	70 - 130	5	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 880-59525-A-7-D MS  
 Matrix: Solid  
 Analysis Batch: 112656

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 112668

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.100	0.09171		mg/Kg		92	70 - 130
Toluene	<0.00198	U	0.100	0.08194		mg/Kg		82	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

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

Lab Sample ID: 880-59525-A-7-D MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 112656

Prep Batch: 112668

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00198	U	0.100	0.08432		mg/Kg		84	70 - 130
m,p-Xylenes	<0.00396	U	0.200	0.1767		mg/Kg		88	70 - 130
o-Xylene	<0.00198	U	0.100	0.08748		mg/Kg		87	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

Lab Sample ID: 880-59525-A-7-E MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 112656

Prep Batch: 112668

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00198	U	0.100	0.09831		mg/Kg		98	70 - 130	7	35
Toluene	<0.00198	U	0.100	0.08929		mg/Kg		89	70 - 130	9	35
Ethylbenzene	<0.00198	U	0.100	0.09215		mg/Kg		92	70 - 130	9	35
m,p-Xylenes	<0.00396	U	0.200	0.1933		mg/Kg		97	70 - 130	9	35
o-Xylene	<0.00198	U	0.100	0.09589		mg/Kg		96	70 - 130	9	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	103		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-112674/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 112684

Prep Batch: 112674

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		06/20/25 10:57	06/20/25 09:14	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		06/20/25 10:57	06/20/25 09:14	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		06/20/25 10:57	06/20/25 09:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	116		70 - 130	06/20/25 10:57	06/20/25 09:14	1
o-Terphenyl (Surr)	118		70 - 130	06/20/25 10:57	06/20/25 09:14	1

Lab Sample ID: LCS 880-112674/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 112684

Prep Batch: 112674

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1201		mg/Kg		120	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1100		mg/Kg		110	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

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

**Lab Sample ID: LCS 880-112674/2-A**  
**Matrix: Solid**  
**Analysis Batch: 112684**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 112674**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	130		70 - 130
o-Terphenyl (Surr)	125		70 - 130

**Lab Sample ID: LCSD 880-112674/3-A**  
**Matrix: Solid**  
**Analysis Batch: 112684**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 112674**

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1008		mg/Kg		101	70 - 130	17		20
Diesel Range Organics (Over C10-C28)	1000	846.7	*1	mg/Kg		85	70 - 130	26		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	74		70 - 130
o-Terphenyl (Surr)	73		70 - 130

**Lab Sample ID: 820-19485-A-1-E MS**  
**Matrix: Solid**  
**Analysis Batch: 112684**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 112674**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	998	893.6		mg/Kg		90	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.7	U *1	998	786.8		mg/Kg		77	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	114		70 - 130
o-Terphenyl (Surr)	109		70 - 130

**Lab Sample ID: 820-19485-A-1-F MSD**  
**Matrix: Solid**  
**Analysis Batch: 112684**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 112674**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	998	864.7		mg/Kg		87	70 - 130	3		20
Diesel Range Organics (Over C10-C28)	<49.7	U *1	998	776.8		mg/Kg		76	70 - 130	1		20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	113		70 - 130
o-Terphenyl (Surr)	108		70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-112650/1-A  
 Matrix: Solid  
 Analysis Batch: 112653

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			06/20/25 08:44	1

Lab Sample ID: LCS 880-112650/2-A  
 Matrix: Solid  
 Analysis Batch: 112653

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	256.5		mg/Kg		103	90 - 110

Lab Sample ID: LCSD 880-112650/3-A  
 Matrix: Solid  
 Analysis Batch: 112653

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	261.4		mg/Kg		105	90 - 110	2	20

Lab Sample ID: 820-19484-2 MS  
 Matrix: Solid  
 Analysis Batch: 112653

Client Sample ID: DS-1 (10-10.5')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1310		251	1492	4	mg/Kg		70	90 - 110

Lab Sample ID: 820-19484-2 MSD  
 Matrix: Solid  
 Analysis Batch: 112653

Client Sample ID: DS-1 (10-10.5')  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1310		251	1486	4	mg/Kg		68	90 - 110	0	20

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Job ID: 820-19484-1  
SDG: KH247057

## GC VOA

## Analysis Batch: 112656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	8021B	112668
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	8021B	112668
MB 880-112668/5-A	Method Blank	Total/NA	Solid	8021B	112668
LCS 880-112668/1-A	Lab Control Sample	Total/NA	Solid	8021B	112668
LCSD 880-112668/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	112668
880-59525-A-7-D MS	Matrix Spike	Total/NA	Solid	8021B	112668
880-59525-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	112668

## Prep Batch: 112668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	5035	
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	5035	
MB 880-112668/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-112668/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-112668/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-59525-A-7-D MS	Matrix Spike	Total/NA	Solid	5035	
880-59525-A-7-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 112712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	Total BTEX	
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 112674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	8015NM Prep	
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	8015NM Prep	
MB 880-112674/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-112674/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-112674/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
820-19485-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
820-19485-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 112684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	8015B NM	112674
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	8015B NM	112674
MB 880-112674/1-A	Method Blank	Total/NA	Solid	8015B NM	112674
LCS 880-112674/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	112674
LCSD 880-112674/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	112674
820-19485-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	112674
820-19485-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	112674

## Analysis Batch: 112708

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Total/NA	Solid	8015 NM	
820-19484-2	DS-1 (10-10.5')	Total/NA	Solid	8015 NM	

Eurofins Lubbock

### QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

#### HPLC/IC

##### Leach Batch: 112650

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Soluble	Solid	DI Leach	
820-19484-2	DS-1 (10-10.5')	Soluble	Solid	DI Leach	
MB 880-112650/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-112650/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-112650/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-19484-2 MS	DS-1 (10-10.5')	Soluble	Solid	DI Leach	
820-19484-2 MSD	DS-1 (10-10.5')	Soluble	Solid	DI Leach	

##### Analysis Batch: 112653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-19484-1	DS-1 (9'-9.5')	Soluble	Solid	300.0	112650
820-19484-2	DS-1 (10-10.5')	Soluble	Solid	300.0	112650
MB 880-112650/1-A	Method Blank	Soluble	Solid	300.0	112650
LCS 880-112650/2-A	Lab Control Sample	Soluble	Solid	300.0	112650
LCSD 880-112650/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	112650
820-19484-2 MS	DS-1 (10-10.5')	Soluble	Solid	300.0	112650
820-19484-2 MSD	DS-1 (10-10.5')	Soluble	Solid	300.0	112650

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12

Job ID: 820-19484-1  
 SDG: KH247057

**Client Sample ID: DS-1 (9'-9.5')**

**Lab Sample ID: 820-19484-1**

Date Collected: 06/13/25 14:30

Matrix: Solid

Date Received: 06/19/25 10:40

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	112668	06/20/25 11:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	112656	06/20/25 13:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			112712	06/20/25 13:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			112708	06/20/25 14:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	112674	06/20/25 10:57	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	112684	06/20/25 14:29	TKC	EET MID
Soluble	Leach	DI Leach			5.00 g	50 mL	112650	06/20/25 07:48	SA	EET MID
Soluble	Analysis	300.0		1			112653	06/20/25 13:15	CH	EET MID

**Client Sample ID: DS-1 (10-10.5')**

**Lab Sample ID: 820-19484-2**

Date Collected: 06/13/25 14:31

Matrix: Solid

Date Received: 06/19/25 10:40

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	112668	06/20/25 11:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	112656	06/20/25 13:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			112712	06/20/25 13:25	SM	EET MID
Total/NA	Analysis	8015 NM		1			112708	06/20/25 14:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	112674	06/20/25 10:57	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	112684	06/20/25 14:44	TKC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	112650	06/20/25 07:48	SA	EET MID
Soluble	Analysis	300.0		1			112653	06/20/25 13:23	CH	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Job ID: 820-19484-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

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

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

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Job ID: 820-19484-1  
SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12

Job ID: 820-19484-1  
SDG: KH247057

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-19484-1	DS-1 (9'-9.5')	Solid	06/13/25 14:30	06/19/25 10:40	9 - 9.5
820-19484-2	DS-1 (10-10.5')	Solid	06/13/25 14:31	06/19/25 10:40	10 - 10.5

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



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

### Eurofins Lubbock

6701 Aberdeen Ave. Suite 8  
 Lubbock, TX 79424  
 Phone: 806-794-1296

### Chain of Custody Record



<b>Client Information (Sub Contract Lab)</b>	Sampler: N/A	Lab Pk.: Kramer, Jessica	Carrier Tracking No(s): N/A	COC No: 820-10839-1
Shipping/Receiving	Phone: N/A	E-Mail: Jessica.Kramer@eurofins.com	State of Origin: Texas	Page: Page 1 of 1
Company: Eurofins Environment Testing South Cent	Address: 1211 W. Florida Ave.	Accreditations Required (See note): NELAP - Texas	Job #: 820-19484-1	Preservation Codes:

City: Midland	Due Date Requested: 6/23/2025	TAT Requested (days): N/A	Analysis Requested
State, Zip: TX, 79701	PO #: N/A	Project #: 82000340	
Phone: 432-704-5440(Tel)	W/O #: N/A	SSOW#: N/A	
Email: N/A	Project Name: Snapping 12	Site: N/A	

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Wet, Solid, Other)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8021B/5035FP_Calc(MOD) BTEX	Total_BTEX_GCV	300_ORGFM_28D/DI_LEACHChloride	8015MOD_NW/8015NM_S_Prep(MOD) Full TPH	8015MOD_Calc	Total Number of containers	Special Instructions/Note:
DS-1 (9-9-5) (820-19484-1)	6/1/3/25	14:30 Central	G	Solid	X	X	X	X	X	X	X	1	
DS-1 (10-10-5) (820-19484-2)	6/1/3/25	14:31 Central	G	Solid	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/shipment being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

**Possible Hazard Identification**

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) \_\_\_\_\_ Primary Deliverable Rank: 2

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished by: *[Signature]* Date/Time: *6/29/25 7:00* Company: \_\_\_\_\_

Relinquished by: *[Signature]* Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact:  Yes  No Custody Seal No.: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: *4.2/4.1/0C IR-8 (-0.1)*

Special Instructions/QC Requirements: \_\_\_\_\_

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Method of Shipment: \_\_\_\_\_

Received by: *[Signature]* Date/Time: *6/29/25 11:00* Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_



### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19484-1

SDG Number: KH247057

**Login Number: 19484**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-19484-1

SDG Number: KH247057

**Login Number: 19484**

**List Number: 2**

**Creator: Lee, Randall**

**List Source: Eurofins Midland**

**List Creation: 06/20/25 11:21 AM**

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	

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



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Joseph Guesnier  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 7/28/2025 1:18:45 PM

## JOB DESCRIPTION

Snapping 12 CTB 2  
 KH247057

## JOB NUMBER

820-20064-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
7/28/2025 1:18:45 PM

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Laboratory Job ID: 820-20064-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	7
QC Sample Results . . . . .	8
QC Association Summary . . . . .	12
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	19

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

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

## Glossary

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

# Case Narrative

Client: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2

Job ID: 820-20064-1

**Job ID: 820-20064-1**

**Eurofins Lubbock**

## Job Narrative 820-20064-1

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

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

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

### Receipt

The sample was received on 7/24/2025 10:13 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -7.0°C.

### GC VOA

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

### Diesel Range Organics

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

### HPLC/IC

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

Eurofins Lubbock



### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

**Client Sample ID: DS-1.2 (13.5-14)**

**Lab Sample ID: 820-20064-1**

Date Collected: 07/23/25 11:15

Matrix: Solid

Date Received: 07/24/25 10:13

Sample Depth: 13.5 - 14.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		07/25/25 09:18	07/25/25 13:38	1
Toluene	<0.00198	U	0.00198		mg/Kg		07/25/25 09:18	07/25/25 13:38	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		07/25/25 09:18	07/25/25 13:38	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		07/25/25 09:18	07/25/25 13:38	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		07/25/25 09:18	07/25/25 13:38	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		07/25/25 09:18	07/25/25 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	07/25/25 09:18	07/25/25 13:38	1
1,4-Difluorobenzene (Surr)	99		70 - 130	07/25/25 09:18	07/25/25 13:38	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			07/25/25 13:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			07/26/25 10:59	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 10:59	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 10:59	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 10:59	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	77		70 - 130	07/25/25 15:21	07/26/25 10:59	1
o-Terphenyl (Surr)	76		70 - 130	07/25/25 15:21	07/26/25 10:59	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.8		10.1		mg/Kg			07/26/25 03:42	1

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
820-20064-1	DS-1.2 (13.5-14)	100	99
880-60766-A-1-B MS	Matrix Spike	107	101
880-60766-A-1-C MSD	Matrix Spike Duplicate	105	97
LCS 880-115011/1-A	Lab Control Sample	105	105
LCSD 880-115011/2-A	Lab Control Sample Dup	92	106
MB 880-115011/5-A	Method Blank	110	83

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
820-20064-1	DS-1.2 (13.5-14)	77	76
880-60777-A-32-D MS	Matrix Spike	86	74
880-60777-A-32-E MSD	Matrix Spike Duplicate	72	77
LCS 880-115057/2-A	Lab Control Sample	105	107
LCSD 880-115057/3-A	Lab Control Sample Dup	94	96
MB 880-115057/1-A	Method Blank	113	109

## Surrogate Legend

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-115011/5-A  
 Matrix: Solid  
 Analysis Batch: 115004

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 115011

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/25/25 09:18	07/25/25 11:54	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/25/25 09:18	07/25/25 11:54	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/25/25 09:18	07/25/25 11:54	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		07/25/25 09:18	07/25/25 11:54	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/25/25 09:18	07/25/25 11:54	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/25/25 09:18	07/25/25 11:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	07/25/25 09:18	07/25/25 11:54	1
1,4-Difluorobenzene (Surr)	83		70 - 130	07/25/25 09:18	07/25/25 11:54	1

Lab Sample ID: LCS 880-115011/1-A  
 Matrix: Solid  
 Analysis Batch: 115004

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 115011

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09675		mg/Kg		97	70 - 130
Toluene	0.100	0.08863		mg/Kg		89	70 - 130
Ethylbenzene	0.100	0.1008		mg/Kg		101	70 - 130
m,p-Xylenes	0.200	0.2005		mg/Kg		100	70 - 130
o-Xylene	0.100	0.09921		mg/Kg		99	70 - 130

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

Lab Sample ID: LCSD 880-115011/2-A  
 Matrix: Solid  
 Analysis Batch: 115004

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 115011

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1048		mg/Kg		105	70 - 130	8	35
Toluene	0.100	0.09416		mg/Kg		94	70 - 130	6	35
Ethylbenzene	0.100	0.1061		mg/Kg		106	70 - 130	5	35
m,p-Xylenes	0.200	0.2091		mg/Kg		105	70 - 130	4	35
o-Xylene	0.100	0.1034		mg/Kg		103	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 880-60766-A-1-B MS  
 Matrix: Solid  
 Analysis Batch: 115004

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 115011

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.09236		mg/Kg		92	70 - 130
Toluene	<0.00200	U	0.100	0.08535		mg/Kg		85	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

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

Lab Sample ID: 880-60766-A-1-B MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 115004

Prep Batch: 115011

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.09516		mg/Kg		95	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1895		mg/Kg		95	70 - 130
o-Xylene	<0.00200	U	0.100	0.09293		mg/Kg		93	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 880-60766-A-1-C MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 115004

Prep Batch: 115011

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00200	U	0.100	0.07832		mg/Kg		78	70 - 130	16	35
Toluene	<0.00200	U	0.100	0.07222		mg/Kg		72	70 - 130	17	35
Ethylbenzene	<0.00200	U	0.100	0.07827		mg/Kg		78	70 - 130	19	35
m,p-Xylenes	<0.00399	U	0.200	0.1538		mg/Kg		77	70 - 130	21	35
o-Xylene	<0.00200	U	0.100	0.07419		mg/Kg		74	70 - 130	22	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-115057/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 115009

Prep Batch: 115057

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 08:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 08:16	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/25/25 15:21	07/26/25 08:16	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	113		70 - 130	07/25/25 15:21	07/26/25 08:16	1
o-Terphenyl (Surr)	109		70 - 130	07/25/25 15:21	07/26/25 08:16	1

Lab Sample ID: LCS 880-115057/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 115009

Prep Batch: 115057

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	966.8		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1095		mg/Kg		109	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

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

Lab Sample ID: LCS 880-115057/2-A

Matrix: Solid

Analysis Batch: 115009

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 115057

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	105		70 - 130
o-Terphenyl (Surr)	107		70 - 130

Lab Sample ID: LCSD 880-115057/3-A

Matrix: Solid

Analysis Batch: 115009

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 115057

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	880.2		mg/Kg		88	70 - 130	9		20
Diesel Range Organics (Over C10-C28)	1000	961.6		mg/Kg		96	70 - 130	13		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	94		70 - 130
o-Terphenyl (Surr)	96		70 - 130

Lab Sample ID: 880-60777-A-32-D MS

Matrix: Solid

Analysis Batch: 115009

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 115057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	997	758.3		mg/Kg		76	70 - 130			
Diesel Range Organics (Over C10-C28)	<50.2	U	997	768.8		mg/Kg		74	70 - 130			

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	86		70 - 130
o-Terphenyl (Surr)	74		70 - 130

Lab Sample ID: 880-60777-A-32-E MSD

Matrix: Solid

Analysis Batch: 115009

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 115057

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	997	753.4		mg/Kg		76	70 - 130	1		20
Diesel Range Organics (Over C10-C28)	<50.2	U	997	835.7		mg/Kg		80	70 - 130	8		20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	72		70 - 130
o-Terphenyl (Surr)	77		70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

**Method: 300.0 - Anions, Ion Chromatography**

Lab Sample ID: MB 880-115058/1-A  
 Matrix: Solid  
 Analysis Batch: 115061

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			07/26/25 03:25	1

Lab Sample ID: LCS 880-115058/2-A  
 Matrix: Solid  
 Analysis Batch: 115061

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	252.8		mg/Kg		101	90 - 110

Lab Sample ID: LCSD 880-115058/3-A  
 Matrix: Solid  
 Analysis Batch: 115061

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	253.4		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 820-20064-1 MS  
 Matrix: Solid  
 Analysis Batch: 115061

Client Sample ID: DS-1.2 (13.5-14)  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	46.8		252	310.8		mg/Kg		105	90 - 110

Lab Sample ID: 820-20064-1 MSD  
 Matrix: Solid  
 Analysis Batch: 115061

Client Sample ID: DS-1.2 (13.5-14)  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	46.8		252	311.9		mg/Kg		105	90 - 110	0	20

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2Job ID: 820-20064-1  
SDG: KH247057

## GC VOA

## Analysis Batch: 115004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	8021B	115011
MB 880-115011/5-A	Method Blank	Total/NA	Solid	8021B	115011
LCS 880-115011/1-A	Lab Control Sample	Total/NA	Solid	8021B	115011
LCSD 880-115011/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	115011
880-60766-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	115011
880-60766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	115011

## Prep Batch: 115011

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	5035	
MB 880-115011/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-115011/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-115011/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-60766-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
880-60766-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 115173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 115009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	8015B NM	115057
MB 880-115057/1-A	Method Blank	Total/NA	Solid	8015B NM	115057
LCS 880-115057/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	115057
LCSD 880-115057/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	115057
880-60777-A-32-D MS	Matrix Spike	Total/NA	Solid	8015B NM	115057
880-60777-A-32-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	115057

## Prep Batch: 115057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	8015NM Prep	
MB 880-115057/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-115057/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-115057/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-60777-A-32-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-60777-A-32-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 115122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 115058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Soluble	Solid	DI Leach	
MB 880-115058/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-115058/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-115058/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Lubbock

### QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
SDG: KH247057

#### HPLC/IC (Continued)

##### Leach Batch: 115058 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1 MS	DS-1.2 (13.5-14)	Soluble	Solid	DI Leach	
820-20064-1 MSD	DS-1.2 (13.5-14)	Soluble	Solid	DI Leach	

##### Analysis Batch: 115061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-20064-1	DS-1.2 (13.5-14)	Soluble	Solid	300.0	115058
MB 880-115058/1-A	Method Blank	Soluble	Solid	300.0	115058
LCS 880-115058/2-A	Lab Control Sample	Soluble	Solid	300.0	115058
LCSD 880-115058/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	115058
820-20064-1 MS	DS-1.2 (13.5-14)	Soluble	Solid	300.0	115058
820-20064-1 MSD	DS-1.2 (13.5-14)	Soluble	Solid	300.0	115058

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

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

**Client Sample ID: DS-1.2 (13.5-14)**

**Lab Sample ID: 820-20064-1**

Date Collected: 07/23/25 11:15

Matrix: Solid

Date Received: 07/24/25 10:13

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	115011	07/25/25 09:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115004	07/25/25 13:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115173	07/25/25 13:38	SA	EET MID
Total/NA	Analysis	8015 NM		1			115122	07/26/25 10:59	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	115057	07/25/25 15:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115009	07/26/25 10:59	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	115058	07/25/25 15:47	SMC	EET MID
Soluble	Analysis	300.0		1			115061	07/26/25 03:42	CS	EET MID

**Laboratory References:**

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

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
 SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2

Job ID: 820-20064-1  
SDG: KH247057

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-20064-1	DS-1.2 (13.5-14)	Solid	07/23/25 11:15	07/24/25 10:13	13.5 - 14.0

---

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



820-20064 Chain of Custody

Loc: 820  
20064



Laboratory: Eurofins  
Address: 6701 Aberdeen  
Lubbock, Texas 79424  
Phone: (806) 794-1296  
Contact: Holly Taylor

ANALYSIS REQUESTED  
Chloride (EPA Method 300) X  
BTEX (EPA Method 8021B) X  
TPH 8015 extended X

TEMP OF COOLER WHEN RECEIVED (°C) 7.0  
Page 1 of 1

Office Location Lubbock, Texas  
Project Manager Chuck Smith  
Sampler's Name Daniel Pavelka

Project Number KH247057  
Project Name Snapping 12 CTB 2

Identifying Marks of Sample(s) DS-1,2 (13.5-14)

Date 7/23/2025  
Time 1115

Matrix S

Comp X

Grab

No. Type of Containers 4 oz Glass 1

Start Depth (ft) 13.5

End Depth (ft) 14.0

Lab Sample ID

NFE

TURNAROUND TIME  
Relinquished by (Signature) [Signature]  
Relinquished by (Signature) [Signature]  
Relinquished by (Signature) [Signature]

TRRP Laboratory Review Checklist  
 48-Hour Rush  
 24-Hour Rush  
 Normal  
Yes  No

Date: 7/24/25 Time: 0942  
Received by (Signature) [Signature] Time: 7/24/25 942

Date: [ ] Time: [ ]  
Received by (Signature) [ ] Time: [ ]

Date: [ ] Time: [ ]  
Received by (Signature) [ ] Time: [ ]

Date: [ ] Time: [ ]  
Received by (Signature) [ ] Time: [ ]

Matrix Container WW/Wastewater VOA - 40 ml vial  
W. Water A/G Amber Glass 1L  
S - Soil 250 ml + Glass wide mouth  
L - Liquid P/O - Plastic or other \_\_\_\_\_  
A - Air Bag C - Charcoal tube  
SI - Sludge

Bill To: Devon Energy Attn: Jim Raley Address: 205 E. Bender Rd, Carlsbad, NM. On Invoice Reference WO No: 21550556

e-mail results to: chuck.smith@terracon.com joseph.guesnier@terracon.com

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140  
Responsive ■ Resourceful ■ Reliable

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-20064-1

SDG Number: KH247057

**Login Number: 20064**

**List Number: 1**

**Creator: Pena, Yazmeane**

**List Source: Eurofins Lubbock**

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	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-20064-1

SDG Number: KH247057

**Login Number: 20064**

**List Number: 2**

**Creator: Vasquez, Julisa**

**List Source: Eurofins Midland**  
**List Creation: 07/25/25 10:34 AM**

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	

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

**Confirmation Sample Analytical Results  
3<sup>rd</sup> NMOCD Incident # nAPP2508758656**



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 10/3/2025 1:03:13 PM

## JOB DESCRIPTION

Snapping 12 CTB 2 Incident # nAPP2508758656  
 KH247057

## JOB NUMBER

820-21183-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
10/3/2025 1:03:13 PM

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Laboratory Job ID: 820-21183-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	9
QC Sample Results . . . . .	10
QC Association Summary . . . . .	14
Lab Chronicle . . . . .	16
Certification Summary . . . . .	17
Method Summary . . . . .	18
Sample Summary . . . . .	19
Chain of Custody . . . . .	20
Receipt Checklists . . . . .	22

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1

**Job ID: 820-21183-1**

**Eurofins Lubbock**

## Job Narrative 820-21183-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/26/2025 3:29 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.4°C.

### GC VOA

Method 8021B: Surrogate recovery for the following samples were outside the upper control limit: CFS-1 (820-21183-1) and CFS-2 (820-21183-2). This sample did not contain any target analytes; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-120162 and analytical batch 880-120265 was outside the upper control limits.

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-120047/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-120155 and analytical batch 880-120174 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Lubbock

## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

Client Sample ID: CFS-1

Lab Sample ID: 820-21183-1

Date Collected: 09/24/25 09:55

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Toluene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
m,p-Xylenes	<0.00398	U	0.00398		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		10/01/25 09:59	10/02/25 21:57	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		10/01/25 09:59	10/02/25 21:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	131	S1+	70 - 130	10/01/25 09:59	10/02/25 21:57	1
1,4-Difluorobenzene (Surr)	102		70 - 130	10/01/25 09:59	10/02/25 21:57	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			10/02/25 21:57	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/25 08:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:15	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	104		70 - 130	09/30/25 08:08	10/03/25 08:15	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:08	10/03/25 08:15	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	665		9.96		mg/Kg			10/01/25 13:04	1

Client Sample ID: CFS-2

Lab Sample ID: 820-21183-2

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 22:17	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/01/25 09:59	10/02/25 22:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130	10/01/25 09:59	10/02/25 22:17	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CFS-2**

**Lab Sample ID: 820-21183-2**

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 2.0 - 2.5

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	116		70 - 130	10/01/25 09:59	10/02/25 22:17	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/02/25 22:17	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			10/03/25 08:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		09/30/25 08:08	10/03/25 08:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	92		70 - 130	09/30/25 08:08	10/03/25 08:29	1
o-Terphenyl (Surr)	114		70 - 130	09/30/25 08:08	10/03/25 08:29	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3270		49.9		mg/Kg			10/01/25 13:10	5

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 0.0 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Toluene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
m,p-Xylenes	<0.00402	U	0.00402		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		10/01/25 09:59	10/02/25 22:38	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		10/01/25 09:59	10/02/25 22:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	130		70 - 130	10/01/25 09:59	10/02/25 22:38	1
1,4-Difluorobenzene (Surr)	113		70 - 130	10/01/25 09:59	10/02/25 22:38	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			10/02/25 22:38	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0		mg/Kg			10/03/25 08:44	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Sample Depth: 0.0 - 2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:08	10/03/25 08:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	87		70 - 130	09/30/25 08:08	10/03/25 08:44	1
o-Terphenyl (Surr)	107		70 - 130	09/30/25 08:08	10/03/25 08:44	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1440		9.92		mg/Kg			10/01/25 13:28	1

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-21183-1	CFS-1	131 S1+	102
820-21183-2	CFS-2	135 S1+	116
820-21183-3	CWS-1	130	113
890-8886-A-31-E MS	Matrix Spike	102	95
890-8886-A-31-F MSD	Matrix Spike Duplicate	101	95
LCS 880-120162/1-A	Lab Control Sample	102	97
LCSD 880-120162/2-A	Lab Control Sample Dup	104	96
MB 880-120162/5-A	Method Blank	158 S1+	98

**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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
820-21183-1	CFS-1	104	124
820-21183-2	CFS-2	92	114
820-21183-3	CWS-1	87	107
890-8882-A-33-B MS	Matrix Spike	92	112
890-8882-A-33-C MSD	Matrix Spike Duplicate	101	123
LCS 880-120047/2-A	Lab Control Sample	108	126
LCSD 880-120047/3-A	Lab Control Sample Dup	115	135 S1+
MB 880-120047/1-A	Method Blank	108	124

**Surrogate Legend**  
 1CO = 1-Chlorooctane (Surr)  
 OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-120162/5-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	10/01/25 09:59	10/02/25 14:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 09:59	10/02/25 14:10	1

Lab Sample ID: LCS 880-120162/1-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1028		mg/Kg		103	70 - 130
Toluene	0.100	0.08437		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08276		mg/Kg		83	70 - 130
m,p-Xylenes	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09611		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-120162/2-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1029		mg/Kg		103	70 - 130	0	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.09015		mg/Kg		90	70 - 130	9	35
m,p-Xylenes	0.200	0.2018		mg/Kg		101	70 - 130	11	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-8886-A-31-E MS  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1026		mg/Kg		103	70 - 130
Toluene	<0.00200	U	0.100	0.07995		mg/Kg		80	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

Lab Sample ID: 890-8886-A-31-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.08459		mg/Kg		85	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.100	0.09614		mg/Kg		96	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-8886-A-31-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00200	U	0.100	0.1009		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.08298		mg/Kg		83	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.07475		mg/Kg		75	70 - 130	12	35
m,p-Xylenes	<0.00399	U	0.200	0.1589		mg/Kg		79	70 - 130	14	35
o-Xylene	<0.00200	U	0.100	0.08859		mg/Kg		89	70 - 130	8	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-120047/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	108		70 - 130	09/30/25 08:07	10/03/25 02:35	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:07	10/03/25 02:35	1

Lab Sample ID: LCS 880-120047/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	923.0		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	877.9		mg/Kg		88	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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

**Lab Sample ID: LCS 880-120047/2-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	108		70 - 130
o-Terphenyl (Surr)	126		70 - 130

**Lab Sample ID: LCSD 880-120047/3-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1045		mg/Kg		105	70 - 130	12		20
Diesel Range Organics (Over C10-C28)	1000	960.8		mg/Kg		96	70 - 130	9		20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	115		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

**Lab Sample ID: 890-8882-A-33-B MS**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	849.5		mg/Kg		85	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	763.2		mg/Kg		76	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	92		70 - 130
o-Terphenyl (Surr)	112		70 - 130

**Lab Sample ID: 890-8882-A-33-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	972.4		mg/Kg		97	70 - 130	13		20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.8		mg/Kg		86	70 - 130	12		20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	101		70 - 130
o-Terphenyl (Surr)	123		70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120155/1-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 12:17	1

Lab Sample ID: LCS 880-120155/2-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-120155/3-A  
 Matrix: Solid  
 Analysis Batch: 120174

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	251.6		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 820-21177-A-1-C MS  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1270		251	1456	4	mg/Kg		76	90 - 110

Lab Sample ID: 820-21177-A-1-D MSD  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1270		251	1461	4	mg/Kg		78	90 - 110	0	20

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## GC VOA

## Prep Batch: 120162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	5035	
820-21183-2	CFS-2	Total/NA	Solid	5035	
820-21183-3	CWS-1	Total/NA	Solid	5035	
MB 880-120162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	5035	
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 120265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8021B	120162
820-21183-2	CFS-2	Total/NA	Solid	8021B	120162
820-21183-3	CWS-1	Total/NA	Solid	8021B	120162
MB 880-120162/5-A	Method Blank	Total/NA	Solid	8021B	120162
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	8021B	120162
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120162
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	8021B	120162
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	120162

## Analysis Batch: 120465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	Total BTEX	
820-21183-2	CFS-2	Total/NA	Solid	Total BTEX	
820-21183-3	CWS-1	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 120047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015NM Prep	
820-21183-2	CFS-2	Total/NA	Solid	8015NM Prep	
820-21183-3	CWS-1	Total/NA	Solid	8015NM Prep	
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 120308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015B NM	120047
820-21183-2	CFS-2	Total/NA	Solid	8015B NM	120047
820-21183-3	CWS-1	Total/NA	Solid	8015B NM	120047
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015B NM	120047
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120047
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120047
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015B NM	120047
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	120047

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

## GC Semi VOA

## Analysis Batch: 120449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Total/NA	Solid	8015 NM	
820-21183-2	CFS-2	Total/NA	Solid	8015 NM	
820-21183-3	CWS-1	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 120155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Soluble	Solid	DI Leach	
820-21183-2	CFS-2	Soluble	Solid	DI Leach	
820-21183-3	CWS-1	Soluble	Solid	DI Leach	
MB 880-120155/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 120174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21183-1	CFS-1	Soluble	Solid	300.0	120155
820-21183-2	CFS-2	Soluble	Solid	300.0	120155
820-21183-3	CWS-1	Soluble	Solid	300.0	120155
MB 880-120155/1-A	Method Blank	Soluble	Solid	300.0	120155
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	300.0	120155
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120155
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	120155
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	120155

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

**Client Sample ID: CFS-1**

**Lab Sample ID: 820-21183-1**

Date Collected: 09/24/25 09:55

Matrix: Solid

Date Received: 09/26/25 15:29

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	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 21:57	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 21:57	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:15	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:15	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 13:04	CS	EET MID

**Client Sample ID: CFS-2**

**Lab Sample ID: 820-21183-2**

Date Collected: 09/24/25 10:00

Matrix: Solid

Date Received: 09/26/25 15:29

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	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 22:17	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 22:17	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:29	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:29	FC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120174	10/01/25 13:10	CS	EET MID

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21183-3**

Date Collected: 09/24/25 10:05

Matrix: Solid

Date Received: 09/26/25 15:29

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 22:38	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120465	10/02/25 22:38	SA	EET MID
Total/NA	Analysis	8015 NM		1			120449	10/03/25 08:44	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:44	FC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 13:28	CS	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
 SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 CTB 2 Incident # nAPP2508758656

Job ID: 820-21183-1  
SDG: KH247057

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
820-21183-1	CFS-1	Solid	09/24/25 09:55	09/26/25 15:29	2.0 - 2.5
820-21183-2	CFS-2	Solid	09/24/25 10:00	09/26/25 15:29	2.0 - 2.5
820-21183-3	CWS-1	Solid	09/24/25 10:05	09/26/25 15:29	0.0 - 2

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

21183

CHAIN OF CUSTODY RECORD

Loc: 820  
21183

LAB USE ONLY  
DUE DATE: \_\_\_\_\_  
TEMP OF COOLER WHEN RECEIVED (°C) 12.4  
Page 1 of 1



Laboratory: Eurofins  
Address: 6701 Aberdeen  
Lubbock, Texas 79424  
Phone: (806) 794-1296  
Contact: Holly Taylor

Sampler's Signature: *[Signature]*

Project Name: Snapping 12 CTB 2 Incident # nAPP2508758656

Matrix	Date	Time	Comp	Grab	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers		ANALYSIS REQUESTED	Yes	No
								4 oz Glass	TPH 8015 extended			
S	9/24/2025	9:55	X		CFS-1	2.0	2.5	1		X	X	
S	9/24/2025	10:00	X		CFS-2	2.0	2.5	1		X	X	
S	9/24/2025	10:05	X		CWS-1	0.0	2	1		X	X	

NFE

TURNAROUND TIME  
Relinquished by (Signature): *[Signature]*  
Relinquished by (Signature): *[Signature]*  
Relinquished by (Signature): *[Signature]*  
Relinquished by (Signature): *[Signature]*

Received by (Signature): *[Signature]* Time: 8:30  
Received by (Signature): *[Signature]* Time: 15:29  
Received by (Signature): \_\_\_\_\_ Time: \_\_\_\_\_  
Received by (Signature): \_\_\_\_\_ Time: \_\_\_\_\_

TRRP Laboratory Review Checklist  
Date: 9/24/25 Time: 8:30  
Date: 9/24/25 Time: 15:29  
Date: \_\_\_\_\_ Time: \_\_\_\_\_  
Date: \_\_\_\_\_ Time: \_\_\_\_\_

Standard  48-Hour Rush  24-Hour Rush   
Bill To: Devon Energy. Attn: Jim Raley Address: 5315 Buena Vista Dr., Cralbsbad, Nm 88220. On Invoice Reference WO # 21550556 and Incident No: nAPP2508758656  
e-mail results to: chuck.smith@terracon.com, joseph.guesnier@terracon.com

Matrix: WW-Wastewater, VOA - 40 ml vial  
Container: A/G - Amber Glass 1L  
S - Soil, 250 ml ± Glass wide mouth  
L - Liquid, P/O - Plastic or other \_\_\_\_\_  
A - Air Bag, C - Charcoal tube  
SL - Sludge

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable



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

### Eurofins Lubbock

6701 Aberdeen Ave. Suite 8  
 Lubbock, TX 79424  
 Phone: 806-794-1296

### Chain of Custody Record



Environment Testing

<b>Client Information (Sub Contract Lab)</b>		Client Contact: N/A	Sampler: N/A	Lab PI#: Kramer, Jessica	Carrier Tracking No(s): N/A	COCC No: 820-11215-1
Shipping/Receiving: N/A		Phone: N/A	Phone: N/A	E-Mail: Jessica.Kramer@get.eurofins.com	State of Origin: Texas	Page: 1 of 1
Company: Eurofins Environment Testing South Cent		Due Date Requested: 10/2/2025		Accreditations Required (See note): NELAP - Texas		Job #: 820-21183-1
Address: 1211 W. Florida Ave.		TAT Requested (days): N/A		Analysis Requested		Preservation Codes:
City: Midland	State, Zip: TX, 79701	PO #: N/A	WO #: N/A	820-21183-1		
Phone: 432-704-5440(Tel)	Project #: 82000340	Field Filtered Sample (Yes or No)				
Email: N/A	SSOW#: N/A	Perform MS/MSD (Yes or No)				
Project Name: Snapping 12 CTB 2 Incident # nAPP2508758656	Site: N/A	8021B/8035FP_Calc(MOD) BTEX				
Matrix (Wet, Solid, Organic, A-Air)		Total_BTEX_GCV				
Sample Type (C=Comp, G=grab, B=Tissue, A-Air)		300_ORGFM_28D/DI_LEACHChloride				
Preservation Code:		8015MOD_NM/8015NM_S_Prep(MOD) Full TPH				
Sample Date		8015MOD_Calc				
CFS-1 (820-21183-1)	9/24/25	09:55	C	Solid	X	X
CFS-2 (820-21183-2)	9/24/25	10:00	C	Solid	X	X
CWS-1 (820-21183-3)	9/24/25	10:05	C	Solid	X	X
Total Number of containers		1				
Special Instructions/Note:		Special Instructions/Note:				

Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/substrate/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central, LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central, LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to Eurofins Environment Testing South Central, LLC.

**Possible Hazard Identification**

Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) \_\_\_\_\_ Primary Deliverable Rank: 2

Special Instructions/QC Requirements: \_\_\_\_\_

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months

Empty Kit Relinquished by: \_\_\_\_\_ Date: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Relinquished by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Custody Seals Intact:  Yes  No Custody Seal No.: \_\_\_\_\_

Cooler Temperature(s) °C and Other Remarks: 3.2/3.1 = 1 TMS

Method of Shipment: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

Received by: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Company: \_\_\_\_\_

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21183-1

SDG Number: KH247057

**Login Number: 21183**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21183-1

SDG Number: KH247057

**Login Number: 21183**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**

**List Creation: 09/30/25 02:56 PM**

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	

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

**Confirmation Sample Analytical Results  
4<sup>th</sup> NMOCD Incident # nAPP2512029165**



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 10/3/2025 1:08:21 PM

## JOB DESCRIPTION

Snapping 12 Incident # nAPP2512029165  
 KH247057

## JOB NUMBER

820-21177-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
10/3/2025 1:08:21 PM

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Laboratory Job ID: 820-21177-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	8
QC Sample Results . . . . .	9
QC Association Summary . . . . .	15
Lab Chronicle . . . . .	17
Certification Summary . . . . .	18
Method Summary . . . . .	19
Sample Summary . . . . .	20
Chain of Custody . . . . .	21
Receipt Checklists . . . . .	23

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1

**Job ID: 820-21177-1**

**Eurofins Lubbock**

## Job Narrative 820-21177-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The samples were received on 9/26/2025 3:29 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.4°C.

### GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-120162 and analytical batch 880-120265 was outside the upper control limits.

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-120047/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-120155 and analytical batch 880-120174 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Lubbock



## Client Sample Results

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
SDG: KH247057

Client Sample ID: CFS-1

Lab Sample ID: 820-21177-1

Date Collected: 09/24/25 10:20

Matrix: Solid

Date Received: 09/26/25 15:29

## 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		10/01/25 10:01	10/01/25 11:55	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:55	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:55	1
m,p-Xylenes	<0.00399	U	0.00399		mg/Kg		10/01/25 10:01	10/01/25 11:55	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:55	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		10/01/25 10:01	10/01/25 11:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	10/01/25 10:01	10/01/25 11:55	1
1,4-Difluorobenzene (Surr)	97		70 - 130	10/01/25 10:01	10/01/25 11:55	1

## Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			10/01/25 11:55	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/25 07:32	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:32	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:32	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	104		70 - 130	09/30/25 08:08	10/03/25 07:32	1
o-Terphenyl (Surr)	126		70 - 130	09/30/25 08:08	10/03/25 07:32	1

## Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1270		10.0		mg/Kg			10/01/25 12:35	1

Client Sample ID: CWS-1

Lab Sample ID: 820-21177-2

Date Collected: 09/24/25 10:25

Matrix: Solid

Date Received: 09/26/25 15:29

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		10/01/25 09:59	10/02/25 21:16	1
Toluene	<0.00198	U	0.00198		mg/Kg		10/01/25 09:59	10/02/25 21:16	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		10/01/25 09:59	10/02/25 21:16	1
m,p-Xylenes	<0.00396	U	0.00396		mg/Kg		10/01/25 09:59	10/02/25 21:16	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		10/01/25 09:59	10/02/25 21:16	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		10/01/25 09:59	10/02/25 21:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/01/25 09:59	10/02/25 21:16	1
1,4-Difluorobenzene (Surr)	105		70 - 130	10/01/25 09:59	10/02/25 21:16	1

Eurofins Lubbock

### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21177-2**

Date Collected: 09/24/25 10:25

Matrix: Solid

Date Received: 09/26/25 15:29

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			10/02/25 21:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/25 07:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:47	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 07:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	97		70 - 130				09/30/25 08:08	10/03/25 07:47	1
o-Terphenyl (Surr)	116		70 - 130				09/30/25 08:08	10/03/25 07:47	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2390		50.5		mg/Kg			10/01/25 12:52	5

## Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
820-21177-1	CFS-1	100	97
820-21177-1 MS	CFS-1	97	100
820-21177-1 MSD	CFS-1	101	97
820-21177-2	CWS-1	127	105
890-8886-A-31-E MS	Matrix Spike	102	95
890-8886-A-31-F MSD	Matrix Spike Duplicate	101	95
LCS 880-120162/1-A	Lab Control Sample	102	97
LCS 880-120163/1-A	Lab Control Sample	99	97
LCSD 880-120162/2-A	Lab Control Sample Dup	104	96
LCSD 880-120163/2-A	Lab Control Sample Dup	97	94
MB 880-120162/5-A	Method Blank	158 S1+	98
MB 880-120163/5-A	Method Blank	95	96

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
820-21177-1	CFS-1	104	126
820-21177-2	CWS-1	97	116
890-8882-A-33-B MS	Matrix Spike	92	112
890-8882-A-33-C MSD	Matrix Spike Duplicate	101	123
LCS 880-120047/2-A	Lab Control Sample	108	126
LCSD 880-120047/3-A	Lab Control Sample Dup	115	135 S1+
MB 880-120047/1-A	Method Blank	108	124

**Surrogate Legend**

1CO = 1-Chlorooctane (Surr)

OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-120162/5-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	10/01/25 09:59	10/02/25 14:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 09:59	10/02/25 14:10	1

Lab Sample ID: LCS 880-120162/1-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1028		mg/Kg		103	70 - 130
Toluene	0.100	0.08437		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08276		mg/Kg		83	70 - 130
m,p-Xylenes	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09611		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-120162/2-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1029		mg/Kg		103	70 - 130	0	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.09015		mg/Kg		90	70 - 130	9	35
m,p-Xylenes	0.200	0.2018		mg/Kg		101	70 - 130	11	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-8886-A-31-E MS  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1026		mg/Kg		103	70 - 130
Toluene	<0.00200	U	0.100	0.07995		mg/Kg		80	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Lab Sample ID: 890-8886-A-31-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00200	U	0.100	0.08459		mg/Kg		85	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.100	0.09614		mg/Kg		96	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-8886-A-31-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U	0.100	0.1009		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.08298		mg/Kg		83	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.07475		mg/Kg		75	70 - 130	12	35
m,p-Xylenes	<0.00399	U	0.200	0.1589		mg/Kg		79	70 - 130	14	35
o-Xylene	<0.00200	U	0.100	0.08859		mg/Kg		89	70 - 130	8	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: MB 880-120163/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120153

Prep Batch: 120163

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:34	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		10/01/25 10:01	10/01/25 11:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 10:01	10/01/25 11:34	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 10:01	10/01/25 11:34	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	10/01/25 10:01	10/01/25 11:34	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/01/25 10:01	10/01/25 11:34	1

Lab Sample ID: LCS 880-120163/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120153

Prep Batch: 120163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09523		mg/Kg		95	70 - 130
Toluene	0.100	0.09491		mg/Kg		95	70 - 130
Ethylbenzene	0.100	0.09724		mg/Kg		97	70 - 130
m,p-Xylenes	0.200	0.1946		mg/Kg		97	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Lab Sample ID: LCS 880-120163/1-A

Matrix: Solid

Analysis Batch: 120153

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 120163

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09617		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	99		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-120163/2-A

Matrix: Solid

Analysis Batch: 120153

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 120163

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09174		mg/Kg		92	70 - 130	4	35
Toluene	0.100	0.09033		mg/Kg		90	70 - 130	5	35
Ethylbenzene	0.100	0.09365		mg/Kg		94	70 - 130	4	35
m,p-Xylenes	0.200	0.1882		mg/Kg		94	70 - 130	3	35
o-Xylene	0.100	0.09293		mg/Kg		93	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 820-21177-1 MS

Matrix: Solid

Analysis Batch: 120153

Client Sample ID: CFS-1

Prep Type: Total/NA

Prep Batch: 120163

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.08977		mg/Kg		90	70 - 130
Toluene	<0.00200	U	0.100	0.08633		mg/Kg		86	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.09089		mg/Kg		91	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1821		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.100	0.08930		mg/Kg		89	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 820-21177-1 MSD

Matrix: Solid

Analysis Batch: 120153

Client Sample ID: CFS-1

Prep Type: Total/NA

Prep Batch: 120163

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.100	0.08713		mg/Kg		87	70 - 130	3	35
Toluene	<0.00200	U	0.100	0.08477		mg/Kg		85	70 - 130	2	35
Ethylbenzene	<0.00200	U	0.100	0.08713		mg/Kg		87	70 - 130	4	35
m,p-Xylenes	<0.00399	U	0.200	0.1759		mg/Kg		88	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.08636		mg/Kg		86	70 - 130	3	35

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Lab Sample ID: 820-21177-1 MSD  
 Matrix: Solid  
 Analysis Batch: 120153

Client Sample ID: CFS-1  
 Prep Type: Total/NA  
 Prep Batch: 120163

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-120047/1-A  
 Matrix: Solid  
 Analysis Batch: 120308

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 120047

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1

Surrogate	MB MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	108		70 - 130	09/30/25 08:07	10/03/25 02:35	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:07	10/03/25 02:35	1

Lab Sample ID: LCS 880-120047/2-A  
 Matrix: Solid  
 Analysis Batch: 120308

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 120047

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Diesel Range Organics (Over C10-C28)	1000	877.9		mg/Kg		88	70 - 130

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	108		70 - 130
o-Terphenyl (Surr)	126		70 - 130

Lab Sample ID: LCSD 880-120047/3-A  
 Matrix: Solid  
 Analysis Batch: 120308

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 120047

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	
								RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1045		mg/Kg		105	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	1000	960.8		mg/Kg		96	70 - 130	9	20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	115		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

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

Lab Sample ID: 890-8882-A-33-B MS  
 Matrix: Solid  
 Analysis Batch: 120308

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 120047

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier					
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	849.5		mg/Kg		85		70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	763.2		mg/Kg		76		70 - 130
Surrogate	MS	MS								
	%Recovery	Qualifier	Limits							
1-Chlorooctane (Surr)	92		70 - 130							
o-Terphenyl (Surr)	112		70 - 130							

Lab Sample ID: 890-8882-A-33-C MSD  
 Matrix: Solid  
 Analysis Batch: 120308

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Total/NA  
 Prep Batch: 120047

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier								
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	972.4		mg/Kg		97		70 - 130	13		20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.8		mg/Kg		86		70 - 130	12		20
Surrogate	MSD	MSD											
	%Recovery	Qualifier	Limits										
1-Chlorooctane (Surr)	101		70 - 130										
o-Terphenyl (Surr)	123		70 - 130										

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120155/1-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 12:17	1

Lab Sample ID: LCS 880-120155/2-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	Limits
Chloride	250	255.2		mg/Kg		102		90 - 110

Lab Sample ID: LCSD 880-120155/3-A  
 Matrix: Solid  
 Analysis Batch: 120174

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

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec	Limits	RPD	Limit
Chloride	250	251.6		mg/Kg		101		90 - 110	1	20

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

**Method: 300.0 - Anions, Ion Chromatography (Continued)**

**Lab Sample ID: 820-21177-1 MS**  
**Matrix: Solid**  
**Analysis Batch: 120174**

**Client Sample ID: CFS-1**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1270		251	1456	4	mg/Kg		76	90 - 110

**Lab Sample ID: 820-21177-1 MSD**  
**Matrix: Solid**  
**Analysis Batch: 120174**

**Client Sample ID: CFS-1**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1270		251	1461	4	mg/Kg		78	90 - 110	0	20

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

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

## GC VOA

## Analysis Batch: 120153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	8021B	120163
MB 880-120163/5-A	Method Blank	Total/NA	Solid	8021B	120163
LCS 880-120163/1-A	Lab Control Sample	Total/NA	Solid	8021B	120163
LCSD 880-120163/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120163
820-21177-1 MS	CFS-1	Total/NA	Solid	8021B	120163
820-21177-1 MSD	CFS-1	Total/NA	Solid	8021B	120163

## Prep Batch: 120162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-2	CWS-1	Total/NA	Solid	5035	
MB 880-120162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	5035	
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Prep Batch: 120163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	5035	
MB 880-120163/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120163/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120163/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
820-21177-1 MS	CFS-1	Total/NA	Solid	5035	
820-21177-1 MSD	CFS-1	Total/NA	Solid	5035	

## Analysis Batch: 120229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	Total BTEX	
820-21177-2	CWS-1	Total/NA	Solid	Total BTEX	

## Analysis Batch: 120265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-2	CWS-1	Total/NA	Solid	8021B	120162
MB 880-120162/5-A	Method Blank	Total/NA	Solid	8021B	120162
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	8021B	120162
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120162
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	8021B	120162
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	120162

## GC Semi VOA

## Prep Batch: 120047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	8015NM Prep	
820-21177-2	CWS-1	Total/NA	Solid	8015NM Prep	
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Lubbock

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

## GC Semi VOA

## Analysis Batch: 120308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	8015B NM	120047
820-21177-2	CWS-1	Total/NA	Solid	8015B NM	120047
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015B NM	120047
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120047
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120047
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015B NM	120047
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	120047

## Analysis Batch: 120447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Total/NA	Solid	8015 NM	
820-21177-2	CWS-1	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 120155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Soluble	Solid	DI Leach	
820-21177-2	CWS-1	Soluble	Solid	DI Leach	
MB 880-120155/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-21177-1 MS	CFS-1	Soluble	Solid	DI Leach	
820-21177-1 MSD	CFS-1	Soluble	Solid	DI Leach	

## Analysis Batch: 120174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-1	CFS-1	Soluble	Solid	300.0	120155
820-21177-2	CWS-1	Soluble	Solid	300.0	120155
MB 880-120155/1-A	Method Blank	Soluble	Solid	300.0	120155
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	300.0	120155
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120155
820-21177-1 MS	CFS-1	Soluble	Solid	300.0	120155
820-21177-1 MSD	CFS-1	Soluble	Solid	300.0	120155

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
 SDG: KH247057

**Client Sample ID: CFS-1**

**Lab Sample ID: 820-21177-1**

**Date Collected: 09/24/25 10:20**

**Matrix: Solid**

**Date Received: 09/26/25 15:29**

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	120163	10/01/25 10:01	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120153	10/01/25 11:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			120229	10/01/25 11:55	SA	EET MID
Total/NA	Analysis	8015 NM		1			120447	10/03/25 07:32	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 07:32	FC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 12:35	CS	EET MID

**Client Sample ID: CWS-1**

**Lab Sample ID: 820-21177-2**

**Date Collected: 09/24/25 10:25**

**Matrix: Solid**

**Date Received: 09/26/25 15:29**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 21:16	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120229	10/02/25 21:16	SA	EET MID
Total/NA	Analysis	8015 NM		1			120447	10/03/25 07:47	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 07:47	FC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	120174	10/01/25 12:52	CS	EET MID

**Laboratory References:**

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21177-1  
SDG: KH247057

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
820-21177-1	CFS-1	Solid	09/24/25 10:20	09/26/25 15:29	Texas
820-21177-2	CWS-1	Solid	09/24/25 10:25	09/26/25 15:29	Texas

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

21177

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED

LAB USE ONLY  
DUE DATE: \_\_\_\_\_

TEMP OF COOLER WHEN RECEIVED (°C) 12.1-1.4  
12.41-0.2

Page 1 of 1

Requested Analysis:

Chloride (EPA Method 300) X

BTEX (EPA Method 8021B) X

TPH 8015 extended X

Laboratory: Eurofins  
Address: 6701 Aberdeen  
Lubbock, Texas 79424

Phone: (806) 794-1296  
Contact: Holly Taylor

Office Location: Lubbock, Texas  
Project Manager: Chuck Smith

Sampler's Name: Daniel Pavelka  
Sampler's Signature: *[Signature]*

Matrix	Date	Time	Comp	Grab	Project Name	Identifying Marks of Sample(s)	Start Depth (FT)	End Depth (FT)	No. Type of Containers	
									4 Oz Glass	
S	9/24/2025	10:20	X		Snapping 12 Incident # nAPP2512029165	CFS-1	2.0	2.5	1	
S	9/24/2025	10:25	X			CWS-1	0.0	2.0	1	

NFE



TURNAROUND TIME

Relinquished by (Signature): *[Signature]* Date: 9/25/25 Time: 8:30

Relinquished by (Signature): *[Signature]* Date: 9/26/25 Time: 15:29

Relinquished by (Signature): *[Signature]* Date: \_\_\_\_\_ Time: \_\_\_\_\_

Relinquished by (Signature): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by (Signature): *[Signature]* Date: 9/25/25 Time: 8:30

Received by (Signature): *[Signature]* Date: 9/26/25 Time: 15:29

Received by (Signature): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Received by (Signature): \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_

Bill To: Devon Energy. Attn: Jim Raley Address: 5315 Buena Vista Dr.,  
Craisbad, Nm 88220. On Invoice Reference WO # 21550556 and  
Incident No: nAPP2512029165

e-mail results to:  
[chuck.smith@terracon.com](mailto:chuck.smith@terracon.com)  
[joseph.guesnier@terracon.com](mailto:joseph.guesnier@terracon.com)

Matrix Container: W - Wastewater, VOA - 40 ml val  
S - Soil, 250 ml = Glass wide mouth  
A - Air Bag, P/O - Plastic or other  
L - Liquid, C - Charcoal tube  
Sl - Sludge

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140  
Responsive ■ Resourceful ■ Reliable

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



### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21177-1

SDG Number: KH247057

**Login Number: 21177**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21177-1

SDG Number: KH247057

**Login Number: 21177**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**  
**List Creation: 09/30/25 02:56 PM**

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	

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

## **Backfill Sample Analytical Results**



Environment Testing

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

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Chuck Smith  
 Terracon Consulting Eng & Scientists  
 5847 50th St  
 Lubbock, Texas 79424

Generated 10/3/2025 1:03:16 PM

## JOB DESCRIPTION

Snapping 12 Incident # nAPP2512029165  
 KH247057

## JOB NUMBER

820-21182-1

Eurofins Lubbock  
 6701 Aberdeen Ave.  
 Suite 8  
 Lubbock TX 79424



# Eurofins Lubbock

## 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.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing South Central, LLC Project Manager.

## Authorization



Generated  
10/3/2025 1:03:16 PM

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

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

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Laboratory Job ID: 820-21182-1  
SDG: KH247057

# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	3
Definitions/Glossary . . . . .	4
Case Narrative . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	7
QC Sample Results . . . . .	8
QC Association Summary . . . . .	12
Lab Chronicle . . . . .	14
Certification Summary . . . . .	15
Method Summary . . . . .	16
Sample Summary . . . . .	17
Chain of Custody . . . . .	18
Receipt Checklists . . . . .	19

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

## Definitions/Glossary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

## Qualifiers

## GC VOA

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

## GC Semi VOA

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

## HPLC/IC

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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: Terracon Consulting Eng & Scientists  
Project: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1

**Job ID: 820-21182-1**

**Eurofins Lubbock**

## Job Narrative 820-21182-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

### Receipt

The sample was received on 9/26/2025 3:29 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.4°C.

### GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-120162 and analytical batch 880-120265 was outside the upper control limits.

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-120047/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-120155 and analytical batch 880-120174 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

Eurofins Lubbock



### Client Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

**Client Sample ID: BFS-1**

**Lab Sample ID: 820-21182-1**

Date Collected: 09/24/25 13:30

Matrix: Solid

Date Received: 09/26/25 15:29

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		10/01/25 09:59	10/02/25 21:36	1
Toluene	<0.00202	U	0.00202		mg/Kg		10/01/25 09:59	10/02/25 21:36	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		10/01/25 09:59	10/02/25 21:36	1
m,p-Xylenes	<0.00404	U	0.00404		mg/Kg		10/01/25 09:59	10/02/25 21:36	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		10/01/25 09:59	10/02/25 21:36	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		10/01/25 09:59	10/02/25 21:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	123		70 - 130	10/01/25 09:59	10/02/25 21:36	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/01/25 09:59	10/02/25 21:36	1

**Method: TAL SOP Total BTEX - Total BTEX Calculation**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			10/02/25 21:36	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			10/03/25 08:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 08:01	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 08:01	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		09/30/25 08:08	10/03/25 08:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane (Surr)	84		70 - 130	09/30/25 08:08	10/03/25 08:01	1
o-Terphenyl (Surr)	101		70 - 130	09/30/25 08:08	10/03/25 08:01	1

**Method: EPA 300.0 - Anions, Ion Chromatography - Soluble**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	584		9.90		mg/Kg			10/01/25 12:58	1

### Surrogate Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

**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)
820-21182-1	BFS-1	123	107
890-8886-A-31-E MS	Matrix Spike	102	95
890-8886-A-31-F MSD	Matrix Spike Duplicate	101	95
LCS 880-120162/1-A	Lab Control Sample	102	97
LCSD 880-120162/2-A	Lab Control Sample Dup	104	96
MB 880-120162/5-A	Method Blank	158 S1+	98

**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)
820-21182-1	BFS-1	84	101
890-8882-A-33-B MS	Matrix Spike	92	112
890-8882-A-33-C MSD	Matrix Spike Duplicate	101	123
LCS 880-120047/2-A	Lab Control Sample	108	126
LCSD 880-120047/3-A	Lab Control Sample Dup	115	135 S1+
MB 880-120047/1-A	Method Blank	108	124

**Surrogate Legend**  
 1CO = 1-Chlorooctane (Surr)  
 OTPH = o-Terphenyl (Surr)

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

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

Lab Sample ID: MB 880-120162/5-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Method Blank  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Toluene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
m,p-Xylenes	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		10/01/25 09:59	10/02/25 14:10	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		10/01/25 09:59	10/02/25 14:10	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130	10/01/25 09:59	10/02/25 14:10	1
1,4-Difluorobenzene (Surr)	98		70 - 130	10/01/25 09:59	10/02/25 14:10	1

Lab Sample ID: LCS 880-120162/1-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1028		mg/Kg		103	70 - 130
Toluene	0.100	0.08437		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08276		mg/Kg		83	70 - 130
m,p-Xylenes	0.200	0.1813		mg/Kg		91	70 - 130
o-Xylene	0.100	0.09611		mg/Kg		96	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-120162/2-A  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Lab Control Sample Dup  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1029		mg/Kg		103	70 - 130	0	35
Toluene	0.100	0.08894		mg/Kg		89	70 - 130	5	35
Ethylbenzene	0.100	0.09015		mg/Kg		90	70 - 130	9	35
m,p-Xylenes	0.200	0.2018		mg/Kg		101	70 - 130	11	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	12	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-8886-A-31-E MS  
 Matrix: Solid  
 Analysis Batch: 120265

Client Sample ID: Matrix Spike  
 Prep Type: Total/NA  
 Prep Batch: 120162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.100	0.1026		mg/Kg		103	70 - 130
Toluene	<0.00200	U	0.100	0.07995		mg/Kg		80	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

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

Lab Sample ID: 890-8886-A-31-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.08459		mg/Kg		85	70 - 130
m,p-Xylenes	<0.00399	U	0.200	0.1826		mg/Kg		91	70 - 130
o-Xylene	<0.00200	U	0.100	0.09614		mg/Kg		96	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-8886-A-31-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120265

Prep Batch: 120162

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	RPD
	Result	Qualifier		Result	Qualifier					Limit	
Benzene	<0.00200	U	0.100	0.1009		mg/Kg		101	70 - 130	2	35
Toluene	<0.00200	U	0.100	0.08298		mg/Kg		83	70 - 130	4	35
Ethylbenzene	<0.00200	U	0.100	0.07475		mg/Kg		75	70 - 130	12	35
m,p-Xylenes	<0.00399	U	0.200	0.1589		mg/Kg		79	70 - 130	14	35
o-Xylene	<0.00200	U	0.100	0.08859		mg/Kg		89	70 - 130	8	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	101		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-120047/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		09/30/25 08:07	10/03/25 02:35	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane (Surr)	108		70 - 130	09/30/25 08:07	10/03/25 02:35	1
o-Terphenyl (Surr)	124		70 - 130	09/30/25 08:07	10/03/25 02:35	1

Lab Sample ID: LCS 880-120047/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 120308

Prep Batch: 120047

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	923.0		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	877.9		mg/Kg		88	70 - 130

Eurofins Lubbock

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

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

**Lab Sample ID: LCS 880-120047/2-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	108		70 - 130
o-Terphenyl (Surr)	126		70 - 130

**Lab Sample ID: LCSD 880-120047/3-A**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	1045		mg/Kg		105	70 - 130	12		20
Diesel Range Organics (Over C10-C28)	1000	960.8		mg/Kg		96	70 - 130	9		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	115		70 - 130
o-Terphenyl (Surr)	135	S1+	70 - 130

**Lab Sample ID: 890-8882-A-33-B MS**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	849.5		mg/Kg		85	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	763.2		mg/Kg		76	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	92		70 - 130
o-Terphenyl (Surr)	112		70 - 130

**Lab Sample ID: 890-8882-A-33-C MSD**  
**Matrix: Solid**  
**Analysis Batch: 120308**

**Client Sample ID: Matrix Spike Duplicate**  
**Prep Type: Total/NA**  
**Prep Batch: 120047**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	1000	972.4		mg/Kg		97	70 - 130	13		20
Diesel Range Organics (Over C10-C28)	<49.9	U	1000	859.8		mg/Kg		86	70 - 130	12		20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane (Surr)	101		70 - 130
o-Terphenyl (Surr)	123		70 - 130

### QC Sample Results

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

#### Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-120155/1-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Method Blank  
 Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0		mg/Kg			10/01/25 12:17	1

Lab Sample ID: LCS 880-120155/2-A  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Lab Control Sample  
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.2		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-120155/3-A  
 Matrix: Solid  
 Analysis Batch: 120174

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	251.6		mg/Kg		101	90 - 110	1	20

Lab Sample ID: 820-21177-A-1-C MS  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	1270		251	1456	4	mg/Kg		76	90 - 110

Lab Sample ID: 820-21177-A-1-D MSD  
 Matrix: Solid  
 Analysis Batch: 120174

Client Sample ID: Matrix Spike Duplicate  
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	1270		251	1461	4	mg/Kg		78	90 - 110	0	20

## QC Association Summary

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

## GC VOA

## Prep Batch: 120162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	5035	
MB 880-120162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	5035	
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 120265

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	8021B	120162
MB 880-120162/5-A	Method Blank	Total/NA	Solid	8021B	120162
LCS 880-120162/1-A	Lab Control Sample	Total/NA	Solid	8021B	120162
LCSD 880-120162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	120162
890-8886-A-31-E MS	Matrix Spike	Total/NA	Solid	8021B	120162
890-8886-A-31-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	120162

## Analysis Batch: 120464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 120047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	8015NM Prep	
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 120308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	8015B NM	120047
MB 880-120047/1-A	Method Blank	Total/NA	Solid	8015B NM	120047
LCS 880-120047/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	120047
LCSD 880-120047/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	120047
890-8882-A-33-B MS	Matrix Spike	Total/NA	Solid	8015B NM	120047
890-8882-A-33-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	120047

## Analysis Batch: 120448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 120155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Soluble	Solid	DI Leach	
MB 880-120155/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Lubbock

### QC Association Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
SDG: KH247057

#### HPLC/IC (Continued)

##### Leach Batch: 120155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

##### Analysis Batch: 120174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
820-21182-1	BFS-1	Soluble	Solid	300.0	120155
MB 880-120155/1-A	Method Blank	Soluble	Solid	300.0	120155
LCS 880-120155/2-A	Lab Control Sample	Soluble	Solid	300.0	120155
LCSD 880-120155/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	120155
820-21177-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	120155
820-21177-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	120155

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

### Lab Chronicle

Client: Terracon Consulting Eng & Scientists  
 Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
 SDG: KH247057

**Client Sample ID: BFS-1**  
**Date Collected: 09/24/25 13:30**  
**Date Received: 09/26/25 15:29**

**Lab Sample ID: 820-21182-1**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	120162	10/01/25 09:59	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	120265	10/02/25 21:36	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120464	10/02/25 21:36	SA	EET MID
Total/NA	Analysis	8015 NM		1			120448	10/03/25 08:01	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	120047	09/30/25 08:08	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	120308	10/03/25 08:01	FC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	120155	10/01/25 08:49	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	120174	10/01/25 12:58	CS	EET MID

**Laboratory References:**

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

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

### Accreditation/Certification Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
SDG: KH247057

#### Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

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

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

### Method Summary

Client: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
SDG: KH247057

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: Terracon Consulting Eng & Scientists  
Project/Site: Snapping 12 Incident # nAPP2512029165

Job ID: 820-21182-1  
SDG: KH247057

---

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Sample Origin
820-21182-1	BFS-1	Solid	09/24/25 13:30	09/26/25 15:29	Texas

---

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

21182

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED

LAB USE ONLY  
DUE DATE: \_\_\_\_\_

TEMP OF COOLER WHEN RECEIVED (°C) -1.2/-1.4  
12/4/-0.2

Page 1 of 1



Laboratory: Eurofins  
Address: 6701 Aberdeen  
Lubbock, Texas 79424

Phone: (806) 794-1296  
Contact: Holly Taylor

Sampler's Name: Daniel Pavelka  
Sampler's Signature: *[Signature]*

Project Number: KH247057  
Project Name: Snapping 12

Identifying Marks of Sample(s): BFS-1

Matrix	Date	Time	Comp	Grab	Start Depth (FT)	End Depth (FT)	No. Type of Containers	4 OZ Glass	1	Lab Sample ID
S	9/24/2025	13:30	X		N/A	N/A				

NFE

TURNAROUND TIME:  Standard  48-Hour Rush  24-Hour Rush

Relinquished by (Signature)	Date	Time	Received by (Signature)	Date	Time
<i>[Signature]</i>	9/25/25	8:30	<i>[Signature]</i>	9/25/25	8:30
<i>[Signature]</i>	9/26/25	1529	<i>[Signature]</i>	9/26/25	15:29

Bill To: Devon Energy. Attn: Jim Raley. Address: 5315 Buena Vista Dr., Cralsbad, Nm 88220. On Invoice Reference WO # 21550556 and Incident No: nAPP2512029165

e-mail results to:  
chuck.smith@terracon.com  
joseph.guesnier@terracon.com

Matrix: WW - Wastewater  
Container: VOA - 40 ml vial

W - Water  
A/G - Amber Glass 1L

S - Soil  
250 ml - Glass wide-mouth

L - Liquid  
P/O - Plastic or other

C - Charcoal tube  
SI - Sludge

Lubbock Office ■ 5847 50th Street ■ Lubbock, Texas 79424 ■ 806-300-0140

Responsive ■ Resourceful ■ Reliable



### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21182-1

SDG Number: KH247057

**Login Number: 21182**

**List Number: 1**

**Creator: Guillen, Kyrstin**

**List Source: Eurofins Lubbock**

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.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

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

### Login Sample Receipt Checklist

Client: Terracon Consulting Eng & Scientists

Job Number: 820-21182-1

SDG Number: KH247057

**Login Number: 21182**

**List Number: 2**

**Creator: Laing, Edmundo**

**List Source: Eurofins Midland**

**List Creation: 09/30/25 02:56 PM**

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	

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

## **APPENDIX F**

# **TERRACON STANDARD OF CARE LIMITATION, AND RELIANCE**

### **Standard of Care**

Terracon's services were performed in a manner consistent with generally accepted practices of the profession undertaken in similar studies in the same geographical area during the same time. Terracon makes no warranties, either express or implied, regarding the findings, conclusions, or recommendations. Please note that Terracon does not warrant the work of laboratories, regulatory agencies, or other third parties supplying information used in the preparation of the report. These services were performed in accordance with the MSA agreed with you, Devon Energy Production Company, LP.

### **Additional Scope Limitations**

The development of this Report is based upon information provided by Devon Energy Production Company, LP. Such information is subject to change over time. Certain indicators of the presence of hazardous substances, petroleum products, or other constituents may have been latent, inaccessible, unobservable, nondetectable, or not present during these services. We cannot represent that the site contains no hazardous substances, toxic materials, petroleum products, or other latent conditions beyond those by information provided by Devon Energy Production Company, LP. The data, interpretations, findings, and recommendations are based solely upon reformation executed within the scope of these services.

### **Reliance**

This work plan has been prepared for the exclusive use of Devon Energy Production Company, LP., and any authorization for use or reliance by any other party (except a governmental entity having jurisdiction over the site) is prohibited without the express written authorization of Devon Energy Production Company, LP., and Terracon. Any unauthorized distribution or reuse is at Devon Energy Production Company, LP., sole risk. Notwithstanding the foregoing, reliance by authorized parties will be subject to the terms, conditions, and limitations stated in the proposal and Devon Energy Production Company, LP., and Terracon's Master Services Agreement. The limitation of liability defined in the terms and conditions is the aggregate limit of Terracon's liability to Devon Energy Production Company, LP., and all relying parties unless otherwise agreed in writing.

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 571110

**QUESTIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2512029165
Incident Name	NAPP2512029165 SNAPPING 12 CTB 2 @ FAB1922153543
Incident Type	Produced Water Release
Incident Status	Deferral Request Received
Incident Facility	[fAB1922153543] SNAPPING 12 CTB 2

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	SNAPPING 12 CTB 2
Date Release Discovered	04/28/2025
Surface Owner	Federal

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
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

<b>Nature and Volume of Release</b>	
<i>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.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Cause: Equipment Failure   Separator   Produced Water   Released: 5 BBL   Recovered: 0 BBL   Lost: 5 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Separator developed leak on dump line. Allowed 5 bbls produced water to impact pad surface.

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 571110

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>More info needed to determine if this will be treated as a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

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

*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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 04/06/2026
--	--

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 3

Action 571110

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**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 75 and 100 (ft.)
What method was used to determine the depth to ground water	Attached Document
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between ½ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between ½ and 1 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between ½ and 1 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (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	Medium
A 100-year floodplain	Between ½ and 1 (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
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

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

Chloride (EPA 300.0 or SM4500 Cl B)	14500
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	09/19/2025
On what date will (or did) the final sampling or liner inspection occur	09/24/2025
On what date will (or was) the remediation complete(d)	10/09/2025
What is the estimated surface area (in square feet) that will be reclaimed	15500
What is the estimated volume (in cubic yards) that will be reclaimed	2300
What is the estimated surface area (in square feet) that will be remediated	500
What is the estimated volume (in cubic yards) that will be remediated	2

*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.*

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 4

Action 571110

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**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 <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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: James Raley Title: EHS Professional Email: jim.raley@dvn.com Date: 04/06/2026
--	--

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.

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 5

Action 571110

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	The release was contained within the skid directly beneath a vessel, pipelines and associated equipment. Due to restricted access beneath the tank and associated equipment, active remediation of the impacted soil is not feasible at this time.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	60
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	4.5
<i>Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.</i>	
Enter the facility ID (f#) on which this deferral should be granted	fAB1922153543 SNAPPING 12 CTB 2
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True
<i>Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.</i>	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
I hereby agree and sign off to the above statement	Name: James Raley Title: EHS Professional Email: jim.raley@dvnm.com Date: 04/06/2026

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS, Page 6

Action 571110

**QUESTIONS (continued)**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>507798</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>09/24/2025</b>
What was the (estimated) number of samples that were to be gathered	<b>2</b>
What was the sampling surface area in square feet	<b>90</b>

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

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

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/oecd/contact-us>

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

CONDITIONS

Action 571110

**CONDITIONS**

Operator: DEVON ENERGY PRODUCTION COMPANY, LP 333 West Sheridan Ave. Oklahoma City, OK 73102	OGRID: 6137
	Action Number: 571110
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**CONDITIONS**

Created By	Condition	Condition Date
scwells	Deferral approved. Deferral of DS-2 is approved until plugging and abandonment or a major facility deconstruction, whichever comes first. A complete and accurate remediation report and/or reclamation report will need to be submitted at that time.	5/12/2026