



October 1, 2024

District Supervisor  
Oil Conservation Division, District 1  
1625 North French Drive  
Hobbs, New Mexico 88240

**Re:** **Remediation Work Plan**  
**Chevron Mid Continent Business Unit**  
**Cicada Unit #022H Flowline Release**  
**Unit Letter D, Section 35, Township 25 South, Range 27 East**  
**Eddy County, New Mexico**  
**nAPP2414869489**  
**DOR: 5/27/2024**  
**Landowner: BLM**

Sir or Madam:

Tetra Tech, Inc. (Tetra Tech) was contacted by Chevron U.S.A., Inc. (Chevron) to assess a release that occurred at the Cicada Unit #022H (API 30-015-45423). The release footprint is located in Public Land Survey System (PLSS) Unit Letter D, Section 35, Township 25 South, and Range 27 East, in Eddy County, New Mexico (Site). The approximate release point coordinates are 32.093063°, -104.165862°. The Site location is shown on **Figures 1 and 2**.

## BACKGROUND

According to the State of New Mexico Notice of Release report, the release was discovered on May 27, 2024. The release was caused by a pinhole leak from a 4-inch below grade flowline. Approximately 58.5 barrels (bbls) of produced water and 11.9 bbls of crude oil were released on the lease pad, of which approximately 4 bbls of produced water and 1 bbl of oil were recovered. The initial C-141 report was submitted to and approved by the New Mexico Oil Conservation Division (NMOCD) on May 30, 2024, and the release was assigned the Incident ID nAPP2414869489.

Chevron requested an extension from the NMOCD for the workplan submittal in an email dated August 14, 2024. The request was made after a second release occurred at the Cicada #022H lease pad (Incident ID nAPP2420727981), to allow for complete assessment and remediation planning for both releases. The extension request was approved by the NMOCD via email on August 14, 2024, for a new due date of November 12, 2024. A copy of the regulatory correspondence is included in Appendix A.

## LAND OWNERSHIP

According to the NMOCD Oil and Gas Map, the Site is located on federal lands managed by the Bureau of Land Management (BLM). A copy of this remediation work plan will be provided to the BLM for approval prior to the initiation of the proposed remediation activities.

**SITE CHARACTERIZATION**

A site characterization was performed in accordance with 19.15.29.11 New Mexico State Administrative Code (NMAC) and the guidance document Process Updates re: Submissions of Form C-141 Release Notification and Corrective Actions (12/01/2023). A summary of the site characterization is presented below:

<b>Shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (feet bgs)</b>	Between 51 and 75 ft
<b>Method used to determine the depth to ground water</b>	NM OSE iWaters Database Search
<b>Did this release impact groundwater or surface water?</b>	No
<b><u>What is the minimum distance between the closest lateral extents of the release and the following surface areas:</u></b>	
<b>A continuously flowing watercourse or any other significant watercourse</b>	Greater than 5 (mi.)
<b>Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)</b>	Greater than 5 (mi.)
<b>An occupied permanent residence, school, hospital, institution, or church</b>	Greater than 5 (mi.)
<b>A spring or private domestic fresh water well used by less than five households for domestic or stock watering purposes</b>	Between 1 and 5 (mi.)
<b>Any other fresh water well or spring</b>	Between 1 and 5 (mi.)
<b>Incorporated municipal boundaries or a defined municipal fresh water well field</b>	Greater than 5 (mi.)
<b>A wetland</b>	Between ½ and 1 (mi.)
<b>A subsurface mine</b>	Greater than 5 (mi.)
<b>A (non-karst) unstable area</b>	Greater than 5 (mi.)
<b>Categorized risk of this well / site being in a karst geology</b>	High
<b>A 100-year floodplain</b>	Between ½ and 1 (mi.)
<b>Did the release impact areas not on an exploration, development, production, or storage site?</b>	No

According to the New Mexico Office of the State Engineer (NMOSE) reporting system, there is one well within a ½-mile (800-meter) radius of the Site, located approximately 0.43 miles (692 meters) east of the release point. The depth to water is measured at 69 feet below ground surface (bgs). The site characterization data is included in Appendix B.

**REGULATORY FRAMEWORK**

Based upon the release footprint and in accordance with Subsection E of 19.15.29.12 NMAC, per 19.15.29.11 NMAC, the site characterization data was used to determine recommended remedial action levels (RRALs) for benzene, toluene, ethylbenzene, and xylene (collectively referred to as BTEX), total petroleum hydrocarbons (TPH), and chlorides in soil.

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Chevron MCBU

Based on the site characterization, the remediation RRALs for the Site are as follows:

<b>Constituent</b>	<b>RRAL</b>
<b>Chloride</b>	600 mg/kg
<b>TPH</b>	100 mg/kg
<b>BTEX</b>	50 mg/kg
<b>Benzene</b>	10 mg/kg

## SITE ASSESSMENT ACTIVITIES

Tetra Tech personnel were onsite on June 18, 2024, to conduct release assessment activities on behalf of Chevron. Three (3) hand auger borings (AH-1 through AH-3) were installed within the release footprint in order to vertically delineate the extent. Four hand auger borings (H-1 through H-4) were installed along the perimeter of the release to horizontally delineate the extent. Photographic documentation of the release extent is included in Appendix C.

Due to hand auger refusal encountered at 1.5 feet bgs, vertical delineation was not achieved as a result of the initial assessment activities. Additionally, horizontal delineation was not achieved to the north (H-1). Therefore, Tetra Tech personnel returned to the Site on August 12-13, 2024, to complete delineation of the release. Four trenches (TT-1 through TT-4) were installed within the release footprint, and three additional horizontal sampling locations (H-5 through H-7) were installed along the perimeter of the release. The sampling locations are presented on Figure 3.

A total of thirty-six (36) soil samples were collected during the June and August assessment events and submitted to Eurofins Testing in Midland, Texas to be analyzed for TPH by EPA method 8015 modified, BTEX by EPA Method 8021B, and chloride by EPA method 300. Copies of the laboratory analytical reports and chain-of-custody documentation are included in Appendix D.

The laboratory analytical results are summarized in Table 1. Analytical results associated with soil sampling locations AH-1/TT-1, AH-2, AH-3, H-1, and TT-4 exceeded the chloride RRAL of 600 mg/kg in sampling intervals ranging from the surface to 1.5 feet bgs. Analytical results associated with sampling locations AH-2 and AH-3 also exceeded the Total TPH RRAL of 100 mg/kg at select sampling intervals from the surface to 1.5 feet bgs. There were no analytical results which exceeded the benzene or Total BTEX RRALs.

## REMEDIATION WORK PLAN

Based on the collected analytical results, Chevron proposes to remove the impacted material as shown in Figure 4. Impacted soils in the vicinity of assessment borings AH-1/TT-1 and AH-3/TT-3 will be excavated using heavy equipment (backhoes, hoe rams, and track hoes) to a maximum total depth of 2 feet below the surrounding surface or until a representative sample from the walls and bottom of the excavation is below the RRALs. Impacted soils in the vicinity of borings TT-1, H-1, and AH-2 will be excavated to a total depth of 1 foot below the surrounding surface or until a representative sample is below the RRALs. Any area containing pressurized lines will be hand-dug to a depth of 2 feet or the maximum extent practicable and heavy equipment will come no more than 3 feet from any pressurized lines.

Excavated soils will be transported offsite and disposed of at an NMOCD-approved or permitted facility. Chevron requests a variance to collect confirmation floor and sidewall samples every 300 square feet for verification of remedial activities, and analyzed for TPH, BTEX, and chlorides. The proposed excavation encompasses a surface area of approximately 3,510 square feet. Once results are received, NMOCD will be notified, and the excavation will then be backfilled with clean material to surface grade. The estimated volume of material to be remediated is approximately 155 cubic yards.

## CONCLUSION

Chevron proposes to begin remediation activities at the Site within 90 days of NMOCD plan approval. Upon completion of the proposed work, a final closure report detailing the remediation activities and the results

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October 1, 2024

Chevron MCBU

of the confirmation sampling will be submitted to NMOCD. If you have any questions concerning the soil assessment or the proposed remediation activities for the Site, please contact Tetra Tech at (432) 682-4559.

Sincerely,  
**Tetra Tech, Inc.**



John Faught, GIT  
Project Manager



Clair Gonzales, PG  
Senior Project Manager



Samantha Abbott, PG  
Project Manager

cc:  
Ms. Kennedy Lincoln – Chevron MCBU

## LIST OF ATTACHMENTS

### Figures:

- Figure 1 – Overview Map
- Figure 2 – Site Location/Topographic Map
- Figure 3 – Approximate Release Extent and Site Assessment
- Figure 4 – Proposed Remediation Map

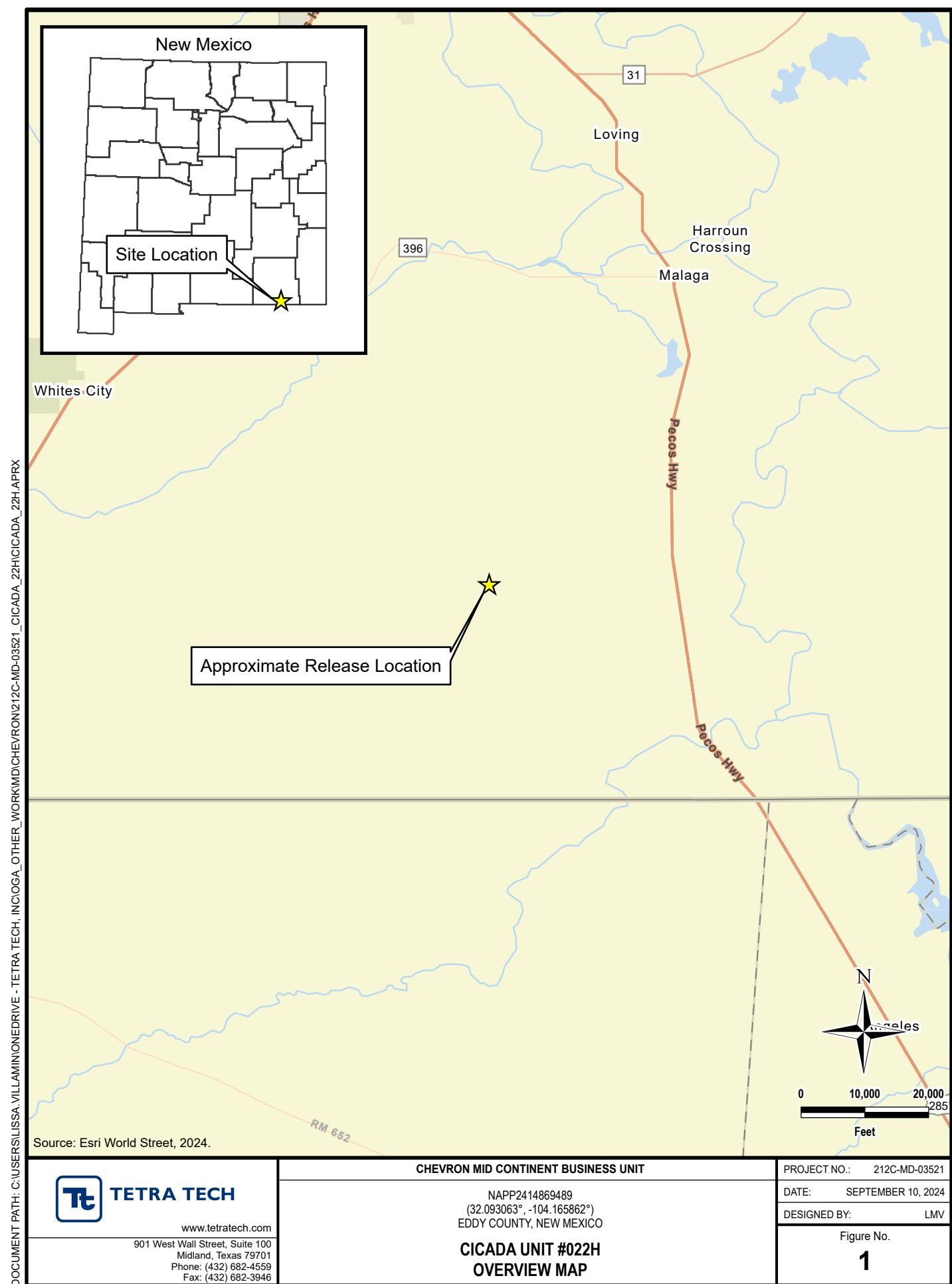
### Tables:

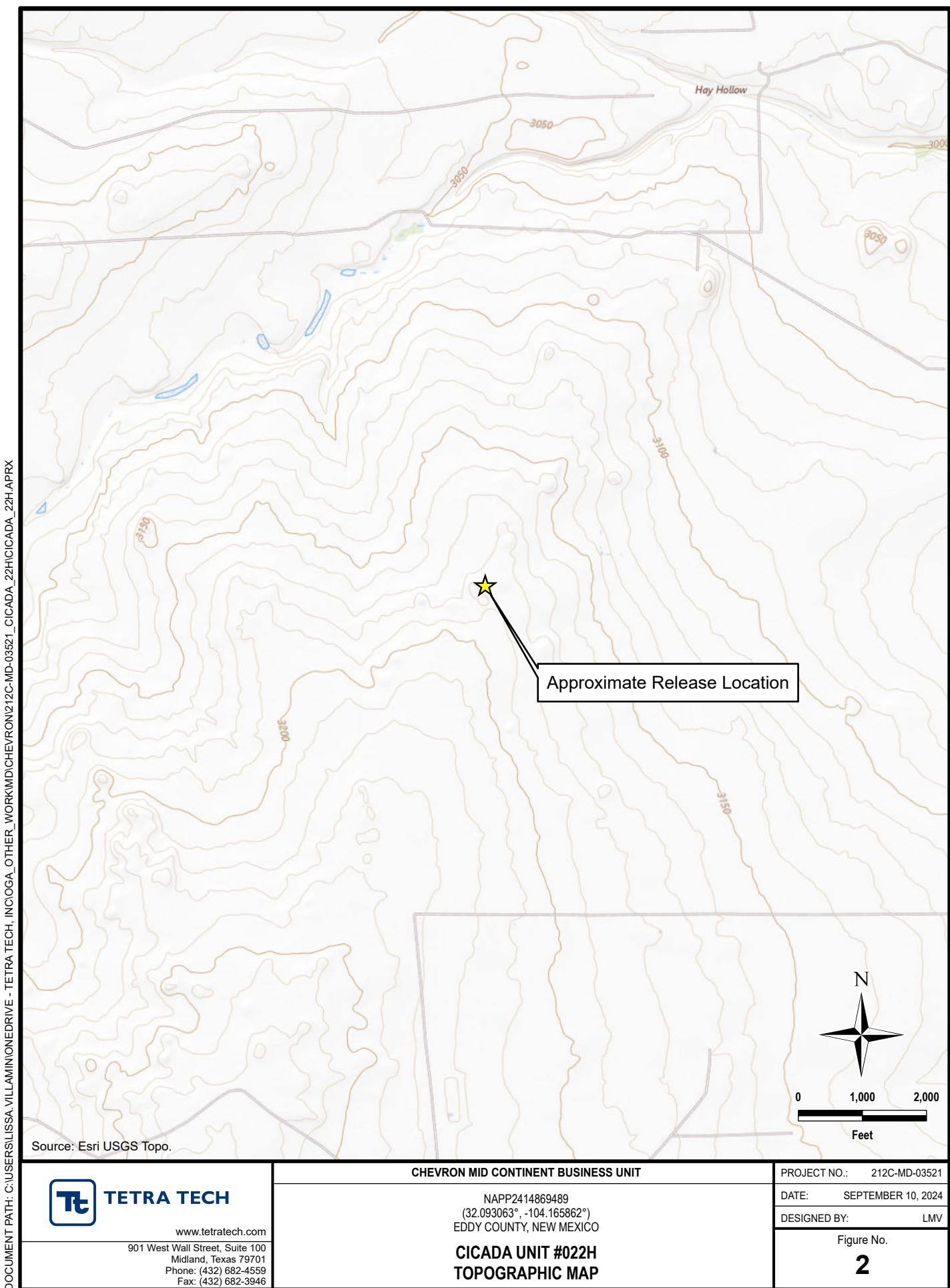
- Table 1 – Summary of Analytical Results – Soil Assessment

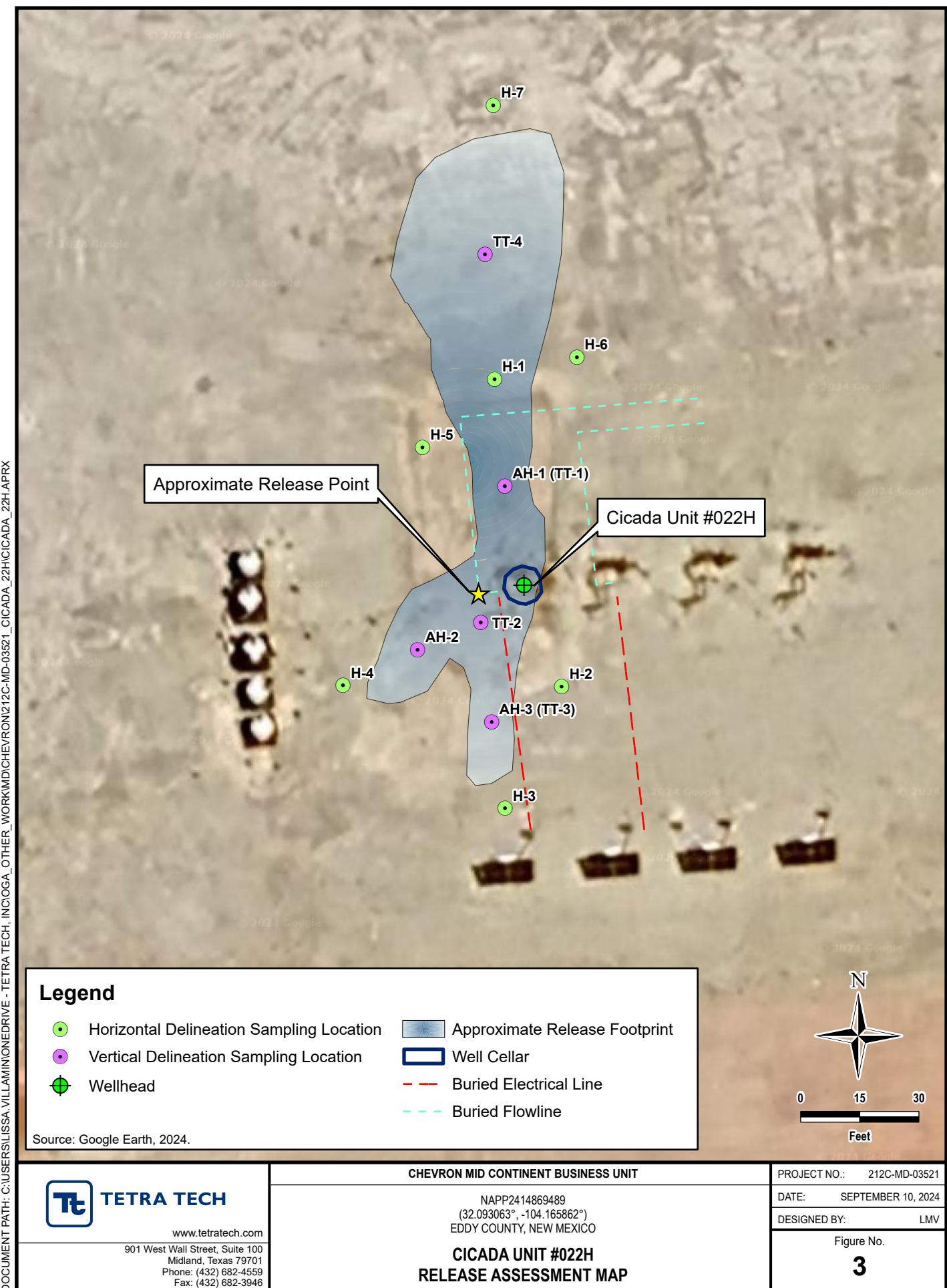
### Appendices:

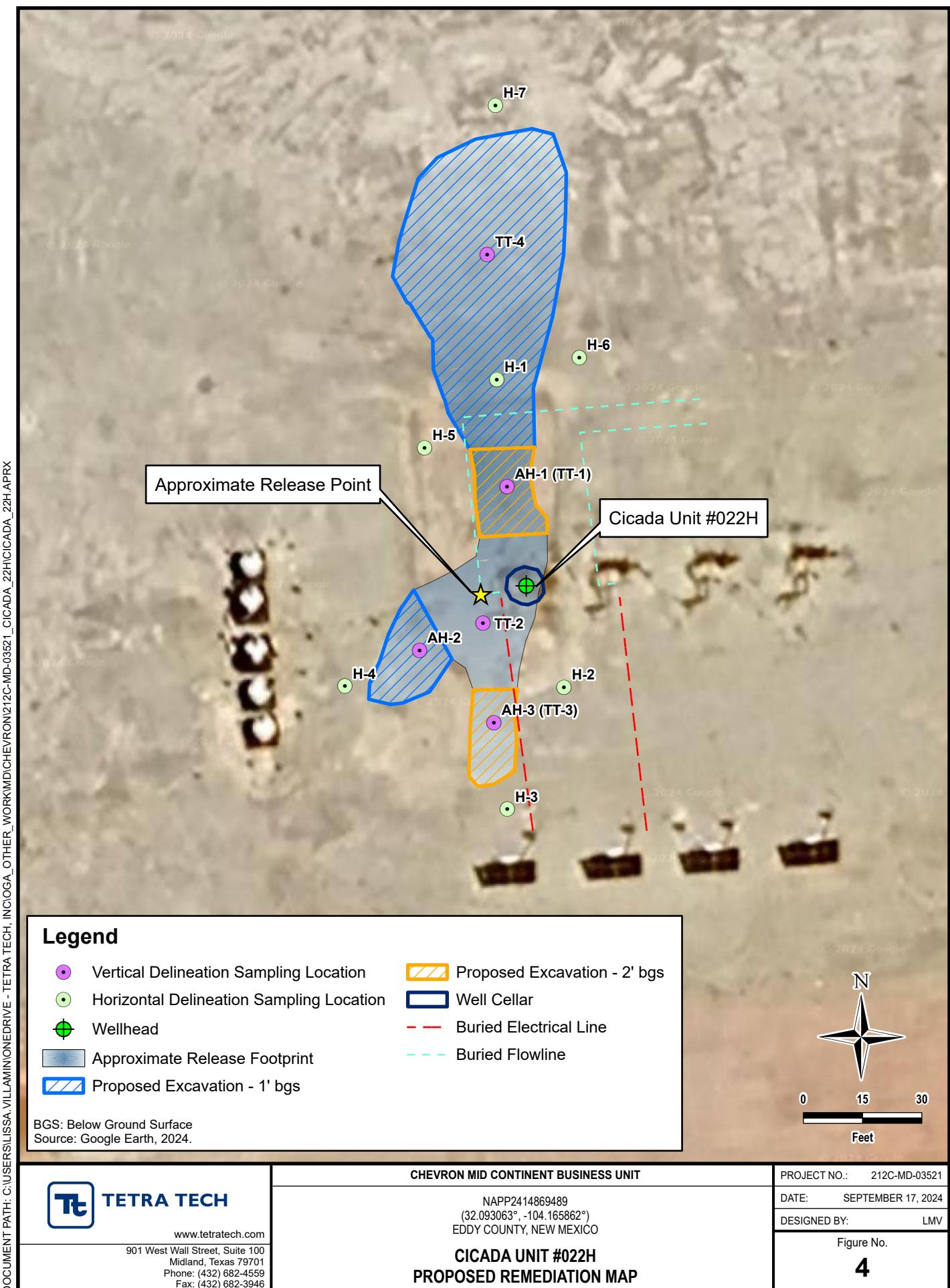
- Appendix A – Regulatory Correspondence
- Appendix B – Site Characterization Data
- Appendix C – Photographic Documentation
- Appendix D – Laboratory Analytical Data

## FIGURES









## TABLES

TABLE 1  
SUMMARY OF ANALYTICAL RESULTS  
SOIL ASSESSMENT - nAPP2414869489 (DOR 5/27/2024)  
CHEVRON MCBU  
CICADA UNIT #022H  
EDDY COUNTY, NEW MEXICO

Sample ID	Sample Date	Sample Depth	Chloride <sup>1</sup> ft. bgs	BTEX <sup>2</sup>								TPH <sup>3</sup>									
				Benzene mg/kg	Toluene mg/kg	Ethylbenzene mg/kg	Total Xylenes mg/kg	Total BTEX mg/kg	GRO mg/kg	DRO mg/kg	MRO mg/kg	Total TPH mg/kg									
VERTICAL DELINEATION SAMPLES																					
AH-1	6/18/2024	0'-1'	<b>1420</b>	<0.00138	U	<0.00198	U	<0.00108	U	<0.00226	U	<0.00226	U	20.4	J B	25.0	J B	<12.5	U	45.4	J
		1'	<b>1200</b>	<0.00140	U	<0.00201	U	<0.00109	U	<0.00229	U	<0.00229	U	16.0	J B	22.4	J B	<12.5	U	38.4	J
		1.5'	<b>1250</b>	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	12.8	J B	19.7	J B	<12.5	U	32.5	J
TT-1	8/13/2024	0-0.5'	<b>643</b>	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.7	U	<15.3	U	<15.3	U	<15.3	U
		1'	419	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.4	U	<15.0	U	<15.0	U	<15.0	U
		2'	186	<0.00140	U	<0.00201	U	<0.00109	U	<0.00229	U	<0.00229	U	<14.5	U	<15.1	U	<15.1	U	<15.1	U
		3'	182	<0.00138	U	<0.00199	U	<0.00108	U	<0.00227	U	<0.00227	U	<14.5	U	<15.1	U	<15.1	U	<15.1	U
		4'	450	<0.00140	U	<0.00201	U	<0.00110	U	<0.00230	U	<0.00230	U	59.6				<15.1	U	59.6	
AH-2	6/18/2024	0-1'	<b>623</b>	<0.00139	U	<0.00199	U	<0.00108	U	<0.00228	U	<0.00228	U	<10.9	U	153	B	<12.5	U	<b>153</b>	
		1'	481	<0.00138	U	<0.00199	U	<0.00108	U	<0.00227	U	<0.00227	U	12.6	J B	19.1	J B	<12.4	U	31.7	J
		1.5'	265	<0.00138	U	<0.00198	U	<0.00108	U	<0.00227	U	<0.00227	U	35.1	J B	33.8	J B	<12.5	U	68.9	
TT-2	8/13/2024	0-0.5'	116	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.6	U	<15.3	U	<15.3	U	<15.3	U
		1'	153	<0.00139	U	<0.00200	U	<0.00109	U	<0.00229	U	<0.00229	U	<14.6	U	<15.2	U	<15.2	U	<15.2	U
		2'	159	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.4	U	<15.0	U	<15.0	U	<15.0	U
		3'	222	<0.00138	U	<0.00199	U	<0.00108	U	<0.00227	U	<0.00227	U	<14.4	U	<15.0	U	<15.0	U	<15.0	U
		4'	241	<0.00140	U	<0.00201	U	<0.00109	U	<0.00229	U	<0.00229	U	<14.5	U	<15.1	U	<15.1	U	<15.1	U
AH-3	6/18/2024	0-1'	326	<0.00140	U	<0.00201	U	0.00780		<0.00229	U	0.00780		14.6	J B	496	B	<12.5	U	<b>511</b>	
		1'	<b>1270</b>	<0.00140	U	<0.00201	U	<0.00109	U	0.0244		0.0244		20.6	J B	39.7	J B	<12.5	U	60.3	
		1.5'	550	<0.00139	U	<0.00199	U	0.00309		<0.00228	U	0.00309	J	16.7	J B	366	B	<12.5	U	<b>383</b>	
TT-3	8/13/2024	0-0.5'	139	<0.00140	U	<0.00201	U	<0.00110	U	<0.00230	U	<0.00230	U	<14.5	U	<15.1	U	<15.1	U	<15.1	U
		1'	185	<0.00138	U	<0.00199	U	<0.00108	U	<0.00227	U	<0.00227	U	<14.4	U	<15.0	U	<15.0	U	<15.0	U
		2'	137	<0.00139	U	<0.00200	U	<0.00109	U	<0.00229	U	<0.00229	U	<14.6	U	<15.2	U	<15.2	U	<15.2	U
		3'	130	<0.00140	U	<0.00201	U	0.00110	J	<0.00229	U	<0.00229	U	<14.6	U	<15.3	U	<15.3	U	<15.3	U
		4'	119	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.7	U	<15.3	U	<15.3	U	<15.3	U
TT-4	8/12/2024	0-0.5'	<b>811</b>	<0.00138	U	<0.00199	U	<0.00108	U	0.00609		0.00609		<14.4	U	38.5	J	<15.0	U	38.5	J
		1'	<b>745</b>	<0.00140	U	<0.00201	U	0.00165	J	0.00546		0.00711		<14.5	U	93.7		<15.1		93.7	
		2'	309	<0.00139	U	<0.00200	U	<0.00109	U	<0.00228	U	<0.00228	U	<14.4	U	<15.0	U	<15.0	U	<15.0	U
		3'	192	<0.00139	U	<0.00200	U	<0.00109	U	0.0893		0.0893		<14.4	U	17.4	J	<15.0	U	17.4	J
		4'	101	F1	<0.00139		<0.00200	U	<0.00109	U	0.00228	U	<0.00228	U	<14.5	U	<15.1	U	<15.1	U	<15.1
H-1	6/18/2024	0-1'	<b>622</b>	<0.00139	U	<0.00199	U	<0.00108	U	<0.00228	U	<0.00228	U	<10.9	U	37.0	J B	<12.5	U	37.0	J
HORIZONTAL DELINEATION SAMPLES																					
H-2	6/18/2024	0-1'	521	<0.00139	U	<0.00200	U	0.00148	J	0.0385		0.0400		<11.0	U	36.3	J B	<12.5	U	36.3	J
H-3	6/18/2024	0-1'	430	<0.00139	U	<0.00200	U	<0.00109	U	<0.00229	U	<0.00229	U	14.9	J B	<14.9	U	<12.5	U	14.9	J
H-4	6/18/2024	0-1'	574	<0.00141	U	<0.00202	U	<0.00110	U	<0.00231	U	<0.00231	U	16.0	J B	<15.0	U	<12.5	U	16.0	J
H-5	8/13/2024	0-1'	184	<0.00140	U	<0.00201	U	<0.00109	U	<0.00229	U	<0.00229	U	<14.6	U	<15.2	U	<15.2	U	<15.2	U
H-6	8/13/2024	0-1'	285	<0.00139	U	<0.00200	U	0.00183	J	0.00242	J	0.00425		<14.6	U	<15.2	U	<15.2	U	<15.2	U
H-7	8/13/2024	0-1'	451	<0.00140	U	<0.00201	U	<0.00110	U	<0.00230	U	<0.00230	U	<14.6	U	<15.3	U	<15.3	U	<15.3	U

NOTES:

ft. Feet

bgs Below ground surface

mg/kg Milligrams per kilogram

TPH Total Petroleum Hydrocarbons

Qualifiers: B Compound was found in the blank and sample.

F1 MS and/or MSD recovery exceeds control limits.

J Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U Indicates the analyte was analyzed for but not detected.

## **APPENDIX A**

### **Regulatory Correspondence**

**From:** [Lincoln, Kennedy](#)  
**To:** [Weigand, Russell](#); [Faught, John](#)  
**Subject:** Fwd: Extension Approved - Request for Extension on Workplan Submittal: nAPP2414869489  
**Date:** Wednesday, August 14, 2024 10:22:11 PM

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**CAUTION:** This email originated from an external sender. Verify the source before opening links or attachments.

Kennedy Lincoln  
MCBU Environmental Specialist  
Mid-Continent Business Unit (MCBU)  
Chevron North America Exploration and Production Company  
6301 Deauville Midland, TX  
Mobile [\(432\) 813-5384](tel:(432)813-5384)  
[Kennedy.Lincoln@chevron.com](mailto:Kennedy.Lincoln@chevron.com)

---

**From:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Sent:** Wednesday, August 14, 2024 2:23 PM  
**To:** Lincoln, Kennedy <Kennedy.Lincoln@chevron.com>  
**Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>; Velez, Nelson, EMNRD <Nelson.Velez@emnrd.nm.gov>  
**Subject:** [\*\*EXTERNAL\*\*] Extension Approved - Request for Extension on Workplan Submittal: nAPP2414869489

**Be aware this external email contains an attachment and/or link.**  
Ensure the email and contents are expected. If there are concerns, please submit suspicious messages to the Cyber Intelligence Center using the Report Phishing button.

RE: Incident #**NAPP2414869489**

**Kennedy,**

Your request for a 90 day extension to **November 12th, 2024** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

**Robert Hamlet** • Environmental Specialist - Advanced  
Environmental Bureau  
EMNRD - Oil Conservation Division  
506 W. Texas Ave. | Artesia, NM 88210  
575.909.0302 | [robert.hamlet@state.nm.us](mailto:robert.hamlet@state.nm.us)  
<http://www.emnrd.state.nm.us/OCD/>



---

**From:** Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>  
**Sent:** Wednesday, August 14, 2024 11:55 AM  
**To:** Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>  
**Cc:** Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>  
**Subject:** FW: [EXTERNAL] Request for Extension on Workplan Submittal: nAPP2414869489

---

**From:** Lincoln, Kennedy <[Kennedy.Lincoln@chevron.com](mailto:Kennedy.Lincoln@chevron.com)>  
**Sent:** Wednesday, August 14, 2024 11:44 AM  
**To:** ocdonline, emnrd, EMNRD <[emnrd.ocdonline@emnrd.nm.gov](mailto:emnrd.ocdonline@emnrd.nm.gov)>; Wells, Shelly, EMNRD <[Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] Request for Extension on Workplan Submittal: nAPP2414869489

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

Hello Shelly,

I am reaching out to request an extension for the workplan submittal for incident ID (n#) nAPP2414869489 at Cicada 022H. The reason I am requesting an extension for this incident number is because we have two spills (nAPP2414869489 and nAPP2420727981) on the same pad, and we would like to make a workplan that will allow the remediation of both areas to be done at the same time. We have currently delineated the impacted area for both spills and are waiting for the sampling information to come back from the lab.

Please let me know if you need any additional information to grant the extension.

Thanks,

Kennedy Lincoln  
MCBU Environmental Specialist  
Mid-Continent Business Unit (MCBU)  
Chevron North America Exploration and Production Company  
6301 Deauville Midland, TX  
Mobile (432) 813-5384  
[Kennedy.Lincoln@chevron.com](mailto:Kennedy.Lincoln@chevron.com)

---

**From:** [OCDOonline@state.nm.us](mailto:OCDOonline@state.nm.us) <[OCDOonline@state.nm.us](mailto:OCDOonline@state.nm.us)>  
**Sent:** Thursday, May 30, 2024 5:55 PM  
**To:** Lincoln, Kennedy <[Kennedy.Lincoln@chevron.com](mailto:Kennedy.Lincoln@chevron.com)>  
**Subject:** [\*\*EXTERNAL\*\*] The Oil Conservation Division (OCD) has approved the application,  
Application ID: 349395

To whom it may concern (c/o Kennedy Lincoln for CHEVRON U S A INC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2414869489, with the following conditions:

- **None**

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

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

Thank you,  
Shelly Wells  
Environmental Specialist-A  
505-469-7520  
[Shelly.Wells@emnrd.nm.gov](mailto:Shelly.Wells@emnrd.nm.gov)

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

## **APPENDIX B**

### **Site Characterization Data**

## Site Characterization Summary

### **Site Information:**

Chevron MCBU  
Cicada Unit 022H  
Eddy County, New Mexico  
T25S, R27E, Section 35, Unit D  
(32.093063°, -104.165862°)

### **Site Characterization:**

-High Karst  
-No significant water features within specified distances  
-Groundwater 69' BGS 0.43 Miles Northeast. (NMOSE, POD C-04371-POD1, 2019 Sample)

### **RRALs:**

-600 mg/kg Chlorides  
-100 mg/kg Total TPH  
-10 mg/kg Benzene  
-50 mg/kg Total BTEX

### **Explanation:**

Due to the Cicada Unit 022H location within a high karst area.

# Cicada Unit #022H

Karst Map



 Cicada Unit #022H

Google Earth

Released to Imaging: 11/1/2024 7:46:26 AM

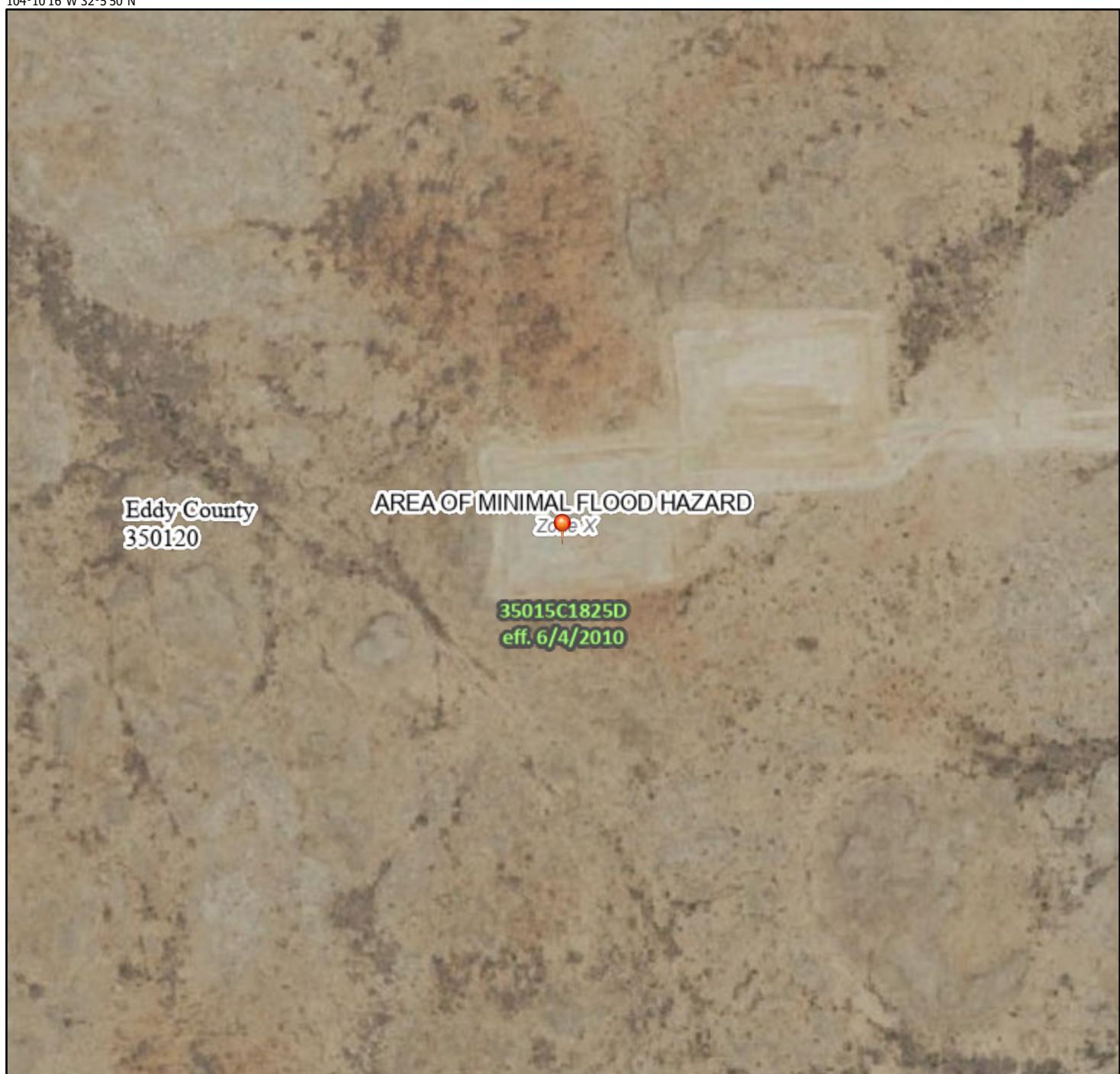
Image © 2024 Airbus

N

1 mi

# National Flood Hazard Layer FIRMette

104°10'16"W 32°5'50"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

### SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)  
Zone A, V, A99
- With BFE or Depth Zone AE, AO, AH, VE, AR
- Regulatory Floodway

- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
- Future Conditions 1% Annual Chance Flood Hazard Zone X
- Area with Reduced Flood Risk due to Levee. See Notes. Zone X
- Area with Flood Risk due to Levee Zone D

### OTHER AREAS OF FLOOD HAZARD

- NO SCREEN Area of Minimal Flood Hazard Zone X
- Effective LOMRs

### OTHER AREAS

- Area of Undetermined Flood Hazard Zone D

### GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

- Cross Sections with 1% Annual Chance
- Water Surface Elevation

- Coastal Transect

- Base Flood Elevation Line (BFE)

- Limit of Study

- Jurisdiction Boundary

- Coastal Transect Baseline

- Profile Baseline

- Hydrographic Feature

- Digital Data Available

- No Digital Data Available

- Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/20/2024 at 4:34 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



# New Mexico Office of the State Engineer

## Water Column/Average Depth to Water

(A CLW##### in the POD suffix indicates the POD has been replaced & no longer serves a water right file.)

(R=POD has been replaced,  
O=orphaned,  
C=the file is closed) (quarters are 1=NW 2=NE 3=SW 4=SE)  
(quarters are smallest to largest) (NAD83 UTM in meters) (In feet)

POD Number	POD Sub-										X	Y	Distance	Depth Well	Depth Water	Water Column
	Code	basin	County	64	16	4	Sec	Tws	Rng							
C 04371 POD1	CUB	ED	3	3	4	26	25S	27E		578711.206	3551054.94		692	100	69	31
												Average Depth to Water:	<b>69 feet</b>			
												Minimum Depth:	<b>69 feet</b>			
												Maximum Depth:	<b>69 feet</b>			

**Record Count:** 1

### UTMNAD83 Radius Search (in meters):

Easting (X): 578711.206

Northing (Y): 3551054.94

Radius: 1600

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



# New Mexico Office of the State Engineer

## Point of Diversion Summary

Well Tag	POD Number	(quarters are 1=NW 2=NE 3=SW 4=SE)						(NAD83 UTM in meters)					
		Q64	Q16	Q4	Sec	Tws	Rng						
NA	C 04371 POD1	3	3	4	26	25S	27E	579369	3551272 				
<hr/>													
<b>Driller License:</b>	1456	<b>Driller Company:</b>				WHITE DRILLING COMPANY							
<b>Driller Name:</b>	WHITE, JOHNNOWN.GENER												
<b>Drill Start Date:</b>	10/17/2019	<b>Drill Finish Date:</b>			10/17/2019		<b>Plug Date:</b>	10/17/2019					
<b>Log File Date:</b>	11/04/2019	<b>PCW Rcv Date:</b>				<b>Source:</b>		Shallow					
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>				<b>Estimated Yield:</b>							
<b>Casing Size:</b>		<b>Depth Well:</b>			100 feet		<b>Depth Water:</b>	69 feet					
<hr/>													
<b>Water Bearing Stratifications:</b>		<b>Top</b>	<b>Bottom</b>	<b>Description</b>									
		5	100	Other/Unknown									
<hr/>													

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

6/20/24 2:22 PM

POINT OF DIVERSION SUMMARY



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National Water Information System: Mapper





## National Wetlands Inventory

## Cicada Unit 022H



June 20, 2024

## Wetlands

- █ Estuarine and Marine Deepwater
- █ Estuarine and Marine Wetland

- █ Freshwater Emergent Wetland
- █ Freshwater Forested/Shrub Wetland
- █ Freshwater Pond
- █ Other
- █ Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

## **APPENDIX C**

### **Photographic Documentation**

**Photographic Log**  
**Chevron U.S.A., Inc.**  
**Cicada Unit #022H**  
**nAPP2414869489 (DOR 5/27/2024)**



Photo 1: View south-southeast of release extent (vicinity of H-1).

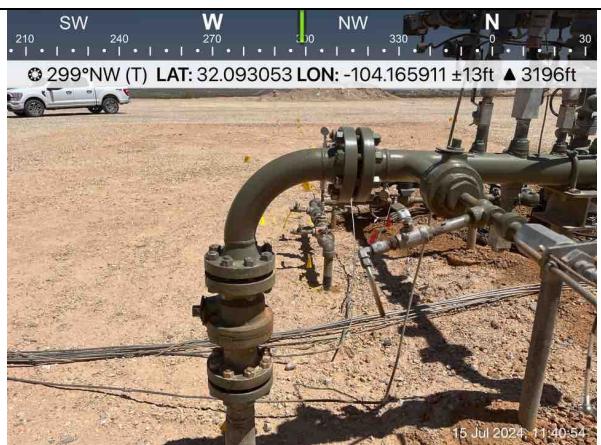


Photo 2: View west-northwest of approximate release point (vicinity of TT-2).



Photo 3: View north of release extent and buried electrical lines (vicinity of AH-3/TT-3).



Photo 4: View northwest of northern portion of release extent (vicinity of TT-4).

Date Taken	Job No.	Photographs Taken By:	Page No.	Client:	Site Name:	 TETRA TECH
07/15/2024	212C-MD-01875	Matt Castrejon	1 of 1	Chevron	Cicada #022H	

## **APPENDIX D**

### **Laboratory Analytical Data**



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: John Faught  
Tetra Tech Inc  
901 W Wall  
Ste 100  
Midland, Texas 79701

Generated 9/25/2024 4:11:37 PM Revision 2

## JOB DESCRIPTION

Cicada Unit 022H Delineation Assessment Release 1  
Eddy County,

## JOB NUMBER

880-47252-1

Eurofins Midland  
1211 W. Florida Ave  
Midland TX 79701

See page two for job notes and contact information.

Released to Imaging: 10/17/2024 7:46:20 AM

# Eurofins Midland

## Job Notes

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

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

## Authorization



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

Generated  
9/25/2024 4:11:37 PM  
Revision 2

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## Definitions/Glossary

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

### Qualifiers

#### GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

#### GC Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

#### HPLC/IC

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

### Glossary

#### Abbreviation

**These commonly used abbreviations may or may not be present in this report.**

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

## Case Narrative

Client: Tetra Tech Inc  
 Project: Cicada Unit 022H Delineation Assessment Release 1

Job ID: 880-47252-1

**Job ID: 880-47252-1****Eurofins Midland**

### Job Narrative 880-47252-1

#### REVISION

The report being provided is a revision of the original report sent on 8/20/2024. The report (revision 1) is being revised due to Revision required to include correct samples.

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

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

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

#### **Receipt**

The samples were received on 8/14/2024 2:20 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 -2.4°C.

#### **Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: H-5 (0-1') (880-47252-1), H-6 (0-1') (880-47252-2), H-7 (0-1') (880-47252-3), TT-1 (0-0.5') (880-47252-4), TT-1 (1') (880-47252-5), TT-1 (2') (880-47252-6), TT-1 (3') (880-47252-7), TT-1 (4') (880-47252-8), TT-2 (0-0.5') (880-47252-9), TT-2 (1') (880-47252-10), TT-2 (3') (880-47252-11), TT-2 (4') (880-47252-12), TT-3 (0-0.5') (880-47252-13), TT-3 (1') (880-47252-14), TT-3 (2') (880-47252-15), TT-3 (3') (880-47252-16), TT-3 (4') (880-47252-17), TT-4 (0-0.5') (880-47252-18), TT-4 (1') (880-47252-19), TT-4 (2') (880-47252-20), TT-4 (4') (880-47252-21), TT-4 (5') (880-47252-22), TT-4 (6') (880-47252-23), TT-4 (7') (880-47252-24) and TT-2 (2') (880-47252-25).

#### **GC VOA**

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-88479 and analytical batch 880-88473 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

#### **Diesel Range Organics**

Method 8015MOD\_NM: CCV was biased high for the diesel range organics. However, since another CCV was acceptable within a 12 hour analysis period the data was qualified and reported.

(CCV 880-88506/21)

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: TT-1 (3') (880-47252-7), TT-4 (1') (880-47252-19) and (MB 880-88454/1-A). Evidence of matrix interferences is not obvious.

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

#### **HPLC/IC**

Method 300\_ORGFM\_28D - Soluble: The Chloride matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-88497 and analytical batch 880-88530 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.

The associated samples are: TT-2 (2') (880-47252-25), (880-47252-A-21-E), (880-47252-A-21-F MS) and (880-47252-A-21-G MSD).

Eurofins Midland

**Case Narrative**

Client: Tetra Tech Inc  
Project: Cicada Unit 022H Delineation Assessment Release 1

Job ID: 880-47252-1

**Job ID: 880-47252-1 (Continued)****Eurofins Midland**

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

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## Case Narrative

Client: Tetra Tech Inc  
 Project: Cicada Unit 022H Delineation Assessment Release 1

Job ID: 880-47252-1

**Job ID: 880-47259-2****Eurofins Midland**

### Job Narrative 880-47259-2

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

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

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

**Receipt**

The samples were received on 8/14/2024 2:20 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 -2.4°C.

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: H-1 (0-1') (880-47259-1), H-2 (0-1') (880-47259-2), H-3 (0-1') (880-47259-3), H-4 (0-1') (880-47259-4), H-5 (0-1') (880-47259-5), TT-1 (4') (880-47259-6), TT-2 (0-0.5') (880-47259-7), TT-2 (1') (880-47259-8), TT-2 (2') (880-47259-9), TT-2 (3') (880-47259-10), TT-2 (4') (880-47259-11), TT-3 (0-0.5') (880-47259-12), TT-3 (1') (880-47259-13), TT-3 (2') (880-47259-14), TT-3 (3') (880-47259-15), TT-3 (4') (880-47259-16), TT-4 (0-0.5') (880-47259-17), TT-4 (1') (880-47259-18), TT-4 (2') (880-47259-19), TT-4 (3') (880-47259-20), TT-4 (3') (880-47259-21) and TT-4 (4') (880-47259-22).

**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 Midland

# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: H-5 (0-1')**

**Lab Sample ID: 880-47252-1**  
**Matrix: Solid**

Date Collected: 08/13/24 11:50  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 12:48	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 12:48	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		08/15/24 09:15	08/15/24 12:48	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 12:48	1
o-Xylene	<0.00159	U F1	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 12:48	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 12:48	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)		89		70 - 130			08/15/24 09:15	08/15/24 12:48	1
1,4-Difluorobenzene (Surr)		117		70 - 130			08/15/24 09:15	08/15/24 12:48	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	0.00402	0.00229	mg/Kg			08/15/24 12:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.2	U	50.1	15.2	mg/Kg			08/15/24 18:07	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	<14.6	U	50.1	14.6	mg/Kg		08/14/24 17:23	08/15/24 18:07	1
Diesel Range Organics (Over C10-C28)	<15.2	U	50.1	15.2	mg/Kg		08/14/24 17:23	08/15/24 18:07	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.1	15.2	mg/Kg		08/14/24 17:23	08/15/24 18:07	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			84	70 - 130			08/14/24 17:23	08/15/24 18:07	1
<i>o</i> -Terphenyl			78	70 - 130			08/14/24 17:23	08/15/24 18:07	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	184		4.98	0.393	mg/Kg			08/16/24 01:45	1

**Client Sample ID: H-6 (0-1')**

**Lab Sample ID: 880-47252-2**  
**Matrix: Solid**

Date Collected: 08/12/24 11:10  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 13:08	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 13:08	1
Ethylbenzene	0.00183 J		0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 13:08	1
m-Xylene & p-Xylene	0.00242 J		0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 13:08	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 13:08	1
Xylenes, Total	0.00242 J		0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 13:08	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)		99		70 - 130			08/15/24 09:15	08/15/24 13:08	1
1,4-Difluorobenzene (Surr)		116		70 - 130			08/15/24 09:15	08/15/24 13:08	1

Eurofins Midland

# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: H-6 (0-1')**  
 Date Collected: 08/12/24 11:10  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-2**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00425		0.00399	0.00228	mg/Kg			08/15/24 13:08	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	50.2	15.2	mg/Kg			08/15/24 19:01	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	<14.6	U	50.2	14.6	mg/Kg			08/15/24 19:01	1
Diesel Range Organics (Over C10-C28)	<15.2	U	50.2	15.2	mg/Kg			08/15/24 19:01	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.2	15.2	mg/Kg			08/15/24 19:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	285		4.98	0.393	mg/Kg			08/16/24 02:07	1

**Client Sample ID: H-7 (0-1')**

**Lab Sample ID: 880-47252-3**

Date Collected: 08/12/24 11:32  
 Date Received: 08/14/24 14:20

**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			08/15/24 09:15	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg			08/15/24 09:15	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg			08/15/24 09:15	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg			08/15/24 09:15	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg			08/15/24 09:15	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg			08/15/24 09:15	1

**Method: Surrogate**

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			1
1,4-Difluorobenzene (Surr)	126		70 - 130			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			08/15/24 13:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.3	U	50.4	15.3	mg/Kg			08/15/24 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	50.4	14.6	mg/Kg			08/15/24 19:19	1

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## Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: H-7 (0-1')**  
 Date Collected: 08/12/24 11:32  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-3**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 19:19	1
Oil Range Organics (Over C28-C36)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 19:19	1
<b>Surrogate</b>									
1-Chlorooctane	95		70 - 130				08/14/24 17:23	08/15/24 19:19	1
o-Terphenyl	87		70 - 130				08/14/24 17:23	08/15/24 19:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	451		5.01	0.396	mg/Kg			08/16/24 02:14	1

**Client Sample ID: TT-1 (0-0.5')**

**Lab Sample ID: 880-47252-4**  
 Matrix: Solid

Date Collected: 08/13/24 12:15  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 13:50	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 13:50	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 13:50	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 13:50	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 13:50	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 13:50	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	106		70 - 130				08/15/24 09:15	08/15/24 13:50	1
1,4-Difluorobenzene (Surr)	115		70 - 130				08/15/24 09:15	08/15/24 13:50	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	0.00399	0.00228	mg/Kg			08/15/24 13:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.3	U	50.5	15.3	mg/Kg			08/15/24 19:37	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	<14.7	U	50.5	14.7	mg/Kg		08/14/24 17:23	08/15/24 19:37	1
Diesel Range Organics (Over C10-C28)	<15.3	U	50.5	15.3	mg/Kg		08/14/24 17:23	08/15/24 19:37	1
Oil Range Organics (Over C28-C36)	<15.3	U	50.5	15.3	mg/Kg		08/14/24 17:23	08/15/24 19:37	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				08/14/24 17:23	08/15/24 19:37	1
o-Terphenyl	84		70 - 130				08/14/24 17:23	08/15/24 19:37	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	643		5.03	0.397	mg/Kg			08/16/24 02:37	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-1 (1')**  
 Date Collected: 08/13/24 12:17  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-5**  
 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		08/15/24 09:15	08/15/24 14:10	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 14:10	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 14:10	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 14:10	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 14:10	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 14:10	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)		99		70 - 130			08/15/24 09:15	08/15/24 14:10	1
1,4-Difluorobenzene (Surr)		115		70 - 130			08/15/24 09:15	08/15/24 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			08/15/24 14:10	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.7	15.0	mg/Kg			08/15/24 19:54	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	<14.4	U	49.7	14.4	mg/Kg		08/14/24 17:23	08/15/24 19:54	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 19:54	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 19:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130				08/14/24 17:23	08/15/24 19:54	1
<i>o</i> -Terphenyl	84		70 - 130				08/14/24 17:23	08/15/24 19:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	419		4.96	0.392	mg/Kg			08/16/24 02:44	1

**Client Sample ID: TT-1 (2')**  
 Date Collected: 08/13/24 12:19  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-6**  
 Matrix: Solid

**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		08/15/24 09:15	08/15/24 14:31	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 14:31	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		08/15/24 09:15	08/15/24 14:31	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 14:31	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 14:31	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 14:31	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)		105		70 - 130			08/15/24 09:15	08/15/24 14:31	1
1,4-Difluorobenzene (Surr)		108		70 - 130			08/15/24 09:15	08/15/24 14:31	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-1 (2')**  
 Date Collected: 08/13/24 12:19  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-6**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			08/15/24 14:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.9	15.1	mg/Kg			08/15/24 20:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		08/14/24 17:23	08/15/24 20:11	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:11	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:11	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	08/14/24 17:23	08/15/24 20:11	1
<i>o</i> -Terphenyl	83		70 - 130	08/14/24 17:23	08/15/24 20:11	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	186		4.95	0.391	mg/Kg			08/16/24 02:51	1

**Client Sample ID: TT-1 (3')**

**Lab Sample ID: 880-47252-7**

Date Collected: 08/13/24 12:22  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 14:51	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		08/15/24 09:15	08/15/24 14:51	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		08/15/24 09:15	08/15/24 14:51	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 14:51	1
<i>o</i> -Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		08/15/24 09:15	08/15/24 14:51	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 14:51	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	08/15/24 09:15	08/15/24 14:51	1
1,4-Difluorobenzene (Surr)	107		70 - 130	08/15/24 09:15	08/15/24 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			08/15/24 14:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.1	U	49.8	15.1	mg/Kg			08/15/24 20:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		08/14/24 17:23	08/15/24 20:28	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-1 (3')**  
 Date Collected: 08/13/24 12:22  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-7**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:28	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:28	1
<b>Surrogate</b>									
1-Chlorooctane	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	189	S1+	70 - 130				08/14/24 17:23	08/15/24 20:28	1
o-Terphenyl		177 S1+	70 - 130				08/14/24 17:23	08/15/24 20:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	182		4.97	0.393	mg/Kg			08/16/24 02:59	1

**Client Sample ID: TT-1 (4')**

**Lab Sample ID: 880-47252-8**  
 Matrix: Solid

**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		08/15/24 09:15	08/15/24 15:12	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 15:12	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		08/15/24 09:15	08/15/24 15:12	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 15:12	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 15:12	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 15:12	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
	101		70 - 130				08/15/24 09:15	08/15/24 15:12	1
1,4-Difluorobenzene (Surr)		109	70 - 130				08/15/24 09:15	08/15/24 15:12	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			08/15/24 15:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	59.6		50.1	15.1	mg/Kg			08/15/24 20:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	50.1	14.5	mg/Kg		08/14/24 17:23	08/15/24 20:45	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>59.6</b>		50.1	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:45	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.1	15.1	mg/Kg		08/14/24 17:23	08/15/24 20:45	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130				08/14/24 17:23	08/15/24 20:45	1
o-Terphenyl	87		70 - 130				08/14/24 17:23	08/15/24 20:45	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	450		5.05	0.399	mg/Kg			08/16/24 03:06	1

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## Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-2 (0-0.5')**

**Lab Sample ID: 880-47252-9**

Matrix: Solid

Date Collected: 08/13/24 12:41  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 15:33	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 15:33	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 15:33	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 15:33	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 15:33	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 15:33	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)	107		70 - 130				08/15/24 09:15	08/15/24 15:33	1
1,4-Difluorobenzene (Surr)	113		70 - 130				08/15/24 09:15	08/15/24 15:33	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	0.00399	0.00228	mg/Kg			08/15/24 15:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.3	U	50.4	15.3	mg/Kg			08/15/24 21:02	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	<14.6	U	50.4	14.6	mg/Kg		08/14/24 17:23	08/15/24 21:02	1
Diesel Range Organics (Over C10-C28)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 21:02	1
Oil Range Organics (Over C28-C36)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 21:02	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	86		70 - 130				08/14/24 17:23	08/15/24 21:02	1
<i>o-Terphenyl</i>	77		70 - 130				08/14/24 17:23	08/15/24 21:02	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	116		5.02	0.397	mg/Kg			08/16/24 03:13	1

**Client Sample ID: TT-2 (1')**

**Lab Sample ID: 880-47252-10**

Matrix: Solid

Date Collected: 08/13/24 12:43  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 15:53	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 15:53	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 15:53	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg		08/15/24 09:15	08/15/24 15:53	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 15:53	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg		08/15/24 09:15	08/15/24 15:53	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				08/15/24 09:15	08/15/24 15:53	1
1,4-Difluorobenzene (Surr)	112		70 - 130				08/15/24 09:15	08/15/24 15:53	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-2 (1')**  
 Date Collected: 08/13/24 12:43  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-10**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00400	0.00229	mg/Kg			08/15/24 15:53	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	50.4	15.2	mg/Kg			08/15/24 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	50.4	14.6	mg/Kg			08/15/24 21:19	1
Diesel Range Organics (Over C10-C28)	<15.2	U	50.4	15.2	mg/Kg			08/15/24 21:19	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.4	15.2	mg/Kg			08/15/24 21:19	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130	08/14/24 17:23	08/15/24 21:19	1
<i>o</i> -Terphenyl	73		70 - 130	08/14/24 17:23	08/15/24 21:19	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	153		5.05	0.399	mg/Kg			08/16/24 03:20	1

**Client Sample ID: TT-2 (3')**

**Lab Sample ID: 880-47252-11**

Date Collected: 08/13/24 12:47  
 Date Received: 08/14/24 14:20

**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			08/15/24 09:15	08/15/24 17:44
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg			08/15/24 09:15	08/15/24 17:44
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg			08/15/24 09:15	08/15/24 17:44
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg			08/15/24 09:15	08/15/24 17:44
<i>o</i> -Xylene	<0.00157	U	0.00199	0.00157	mg/Kg			08/15/24 09:15	08/15/24 17:44
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg			08/15/24 09:15	08/15/24 17:44

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	08/15/24 09:15	08/15/24 17:44	1
1,4-Difluorobenzene (Surr)	106		70 - 130	08/15/24 09:15	08/15/24 17:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00227	U	0.00398	0.00227	mg/Kg			08/15/24 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	<15.0	U	49.7	15.0	mg/Kg			08/15/24 21:51	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			08/15/24 21:51	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-2 (3')**  
 Date Collected: 08/13/24 12:47  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-11**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 21:51	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 21:51	1
<b>Surrogate</b>									
1-Chlorooctane	86		70 - 130				08/14/24 17:23	08/15/24 21:51	1
o-Terphenyl	78		70 - 130				08/14/24 17:23	08/15/24 21:51	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	222		4.96	0.392	mg/Kg			08/16/24 20:15	1

**Client Sample ID: TT-2 (4')**

**Lab Sample ID: 880-47252-12**  
 Matrix: Solid

Date Collected: 08/13/24 12:52  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 18:05	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 18:05	1
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		08/15/24 09:15	08/15/24 18:05	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 18:05	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 18:05	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 18:05	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	116		70 - 130				08/15/24 09:15	08/15/24 18:05	1
1,4-Difluorobenzene (Surr)	121		70 - 130				08/15/24 09:15	08/15/24 18:05	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00229	U	0.00402	0.00229	mg/Kg			08/15/24 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	<15.1	U	49.8	15.1	mg/Kg			08/15/24 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.8	14.5	mg/Kg		08/14/24 17:23	08/15/24 22:08	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.8	15.1	mg/Kg		08/14/24 17:23	08/15/24 22:08	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.8	15.1	mg/Kg		08/14/24 17:23	08/15/24 22:08	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	241		4.96	0.392	mg/Kg			08/16/24 20:35	1

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# Client Sample Results

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

**Client Sample ID: TT-3 (0-0.5')****Lab Sample ID: 880-47252-13**

Matrix: Solid

Date Collected: 08/13/24 13:10

Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 18:26	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 18:26	1
Ethylbenzene	<0.00110	U	0.00201	0.00110	mg/Kg		08/15/24 09:15	08/15/24 18:26	1
m-Xylene & p-Xylene	<0.00230	U	0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 18:26	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 18:26	1
Xylenes, Total	<0.00230	U	0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 18:26	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)		99		70 - 130			08/15/24 09:15	08/15/24 18:26	1
1,4-Difluorobenzene (Surr)		110		70 - 130			08/15/24 09:15	08/15/24 18:26	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			08/15/24 18:26	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			08/15/24 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.5	U	49.9	14.5	mg/Kg		08/14/24 17:23	08/15/24 22:24	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:23	08/15/24 22:24	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:23	08/15/24 22:24	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			85	70 - 130			08/14/24 17:23	08/15/24 22:24	1
<i>o</i> -Terphenyl			80	70 - 130			08/14/24 17:23	08/15/24 22:24	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		4.96	0.392	mg/Kg			08/16/24 21:19	1

**Client Sample ID: TT-3 (1')****Lab Sample ID: 880-47252-14**

Matrix: Solid

Date Collected: 08/13/24 13:11

Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 18:46	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		08/15/24 09:15	08/15/24 18:46	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		08/15/24 09:15	08/15/24 18:46	1
m-Xylene & p-Xylene	<0.00227	U	0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 18:46	1
o-Xylene	<0.00157	U	0.00199	0.00157	mg/Kg		08/15/24 09:15	08/15/24 18:46	1
Xylenes, Total	<0.00227	U	0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 18:46	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)		108		70 - 130			08/15/24 09:15	08/15/24 18:46	1
1,4-Difluorobenzene (Surr)		109		70 - 130			08/15/24 09:15	08/15/24 18:46	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-3 (1')**  
 Date Collected: 08/13/24 13:11  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-14**  
 Matrix: Solid

**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			08/15/24 18:46	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			08/15/24 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U	49.6	14.4	mg/Kg			08/15/24 22:40	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg			08/15/24 22:40	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg			08/15/24 22:40	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130	08/14/24 17:23	08/15/24 22:40	1
<i>o</i> -Terphenyl	84		70 - 130	08/14/24 17:23	08/15/24 22:40	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	185		5.05	0.399	mg/Kg			08/16/24 21:26	1

**Client Sample ID: TT-3 (2')**

**Lab Sample ID: 880-47252-15**

Date Collected: 08/13/24 13:15  
 Date Received: 08/14/24 14:20

**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			08/15/24 09:15	08/15/24 19:07	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg			08/15/24 09:15	08/15/24 19:07	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg			08/15/24 09:15	08/15/24 19:07	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg			08/15/24 09:15	08/15/24 19:07	1
<i>o</i> -Xylene	<0.00158	U	0.00200	0.00158	mg/Kg			08/15/24 09:15	08/15/24 19:07	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg			08/15/24 09:15	08/15/24 19:07	1

**Surrogate**

	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	08/15/24 09:15	08/15/24 19:07	1
1,4-Difluorobenzene (Surr)	112		70 - 130	08/15/24 09:15	08/15/24 19:07	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	0.00400	0.00229	mg/Kg			08/15/24 19:07	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			08/15/24 22:56	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			08/15/24 22:56	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-3 (2')**  
 Date Collected: 08/13/24 13:15  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-15**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<15.2	U	50.2	15.2	mg/Kg		08/14/24 17:23	08/15/24 22:56	1
Oil Range Organics (Over C28-C36)	<15.2	U	50.2	15.2	mg/Kg		08/14/24 17:23	08/15/24 22:56	1
<b>Surrogate</b>									
1-Chlorooctane	83		70 - 130				08/14/24 17:23	08/15/24 22:56	1
o-Terphenyl	75		70 - 130				08/14/24 17:23	08/15/24 22:56	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	137		4.98	0.393	mg/Kg			08/16/24 21:34	1

**Client Sample ID: TT-3 (3')**

**Lab Sample ID: 880-47252-16**  
 Matrix: Solid

Date Collected: 08/13/24 13:18  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 19:27	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 19:27	1
Ethylbenzene	0.00110	J	0.00201	0.00109	mg/Kg		08/15/24 09:15	08/15/24 19:27	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 19:27	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 19:27	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:15	08/15/24 19:27	1
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	103		70 - 130				08/15/24 09:15	08/15/24 19:27	1
1,4-Difluorobenzene (Surr)	114		70 - 130				08/15/24 09:15	08/15/24 19:27	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	0.00402	0.00229	mg/Kg			08/15/24 19:27	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.3	U	50.4	15.3	mg/Kg			08/15/24 23:12	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	50.4	14.6	mg/Kg		08/14/24 17:23	08/15/24 23:12	1
Diesel Range Organics (Over C10-C28)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 23:12	1
Oil Range Organics (Over C28-C36)	<15.3	U	50.4	15.3	mg/Kg		08/14/24 17:23	08/15/24 23:12	1

**Surrogate**

%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
80		70 - 130		08/14/24 17:23	08/15/24 23:12
72		70 - 130		08/14/24 17:23	08/15/24 23:12

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	130		5.04	0.398	mg/Kg			08/16/24 21:56	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-3 (4')**  
 Date Collected: 08/13/24 13:22  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-17**  
 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		08/15/24 09:15	08/15/24 19:48	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 19:48	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 19:48	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 19:48	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 19:48	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 19:48	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)		105		70 - 130			08/15/24 09:15	08/15/24 19:48	1
1,4-Difluorobenzene (Surr)		115		70 - 130			08/15/24 09:15	08/15/24 19:48	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	0.00399	0.00228	mg/Kg			08/15/24 19:48	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.3	U	50.5	15.3	mg/Kg			08/15/24 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.7	U	50.5	14.7	mg/Kg		08/14/24 17:23	08/15/24 23:28	1
Diesel Range Organics (Over C10-C28)	<15.3	U	50.5	15.3	mg/Kg		08/14/24 17:23	08/15/24 23:28	1
Oil Range Organics (Over C28-C36)	<15.3	U	50.5	15.3	mg/Kg		08/14/24 17:23	08/15/24 23:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130				08/14/24 17:23	08/15/24 23:28	1
<i>o</i> -Terphenyl	79		70 - 130				08/14/24 17:23	08/15/24 23:28	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	119		4.99	0.394	mg/Kg			08/16/24 22:03	1

**Client Sample ID: TT-4 (0-0.5')**

**Lab Sample ID: 880-47252-18**  
 Matrix: Solid

Date Collected: 08/12/24 12:20  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 20:09	1
Toluene	<0.00199	U	0.00199	0.00199	mg/Kg		08/15/24 09:15	08/15/24 20:09	1
Ethylbenzene	<0.00108	U	0.00199	0.00108	mg/Kg		08/15/24 09:15	08/15/24 20:09	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00411</b>		0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 20:09	1
<b>o-Xylene</b>	<b>0.00198</b>	<b>J</b>	0.00199	0.00157	mg/Kg		08/15/24 09:15	08/15/24 20:09	1
<b>Xylenes, Total</b>	<b>0.00609</b>		0.00398	0.00227	mg/Kg		08/15/24 09:15	08/15/24 20:09	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)		95		70 - 130			08/15/24 09:15	08/15/24 20:09	1
1,4-Difluorobenzene (Surr)		120		70 - 130			08/15/24 09:15	08/15/24 20:09	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-4 (0-0.5')**

**Lab Sample ID: 880-47252-18**

Matrix: Solid

Date Collected: 08/12/24 12:20  
 Date Received: 08/14/24 14:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00609		0.00398	0.00227	mg/Kg			08/15/24 20:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	38.5	J	49.7	15.0	mg/Kg			08/15/24 23:44	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	<14.4	U	49.7	14.4	mg/Kg		08/14/24 17:23	08/15/24 23:44	1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>38.5</b>	<b>J</b>	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 23:44	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:23	08/15/24 23:44	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	811		25.3	1.99	mg/Kg			08/16/24 22:11	5

**Client Sample ID: TT-4 (1')**

**Lab Sample ID: 880-47252-19**

Matrix: Solid

Date Collected: 08/12/24 12:22  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 20:29	1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg		08/15/24 09:15	08/15/24 20:29	1
<b>Ethylbenzene</b>	<b>0.00165</b>	<b>J</b>	0.00201	0.00110	mg/Kg		08/15/24 09:15	08/15/24 20:29	1
<b>m-Xylene &amp; p-Xylene</b>	<b>0.00546</b>		0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 20:29	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:15	08/15/24 20:29	1
<b>Xylenes, Total</b>	<b>0.00546</b>		0.00402	0.00230	mg/Kg		08/15/24 09:15	08/15/24 20:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00711		0.00402	0.00230	mg/Kg			08/15/24 20:29	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	93.7		50.0	15.1	mg/Kg			08/16/24 00:01	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	50.0	14.5	mg/Kg		08/14/24 17:23	08/16/24 00:01	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-4 (1)**  
 Date Collected: 08/12/24 12:22  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-19**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	93.7		50.0	15.1	mg/Kg		08/14/24 17:23	08/16/24 00:01	1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg		08/14/24 17:23	08/16/24 00:01	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	155	S1+	70 - 130				08/14/24 17:23	08/16/24 00:01	1
o-Terphenyl	142	S1+	70 - 130				08/14/24 17:23	08/16/24 00:01	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	745		5.05	0.399	mg/Kg			08/16/24 22:18	1

**Client Sample ID: TT-4 (2)**

**Lab Sample ID: 880-47252-20**  
 Matrix: Solid

Date Collected: 08/12/24 12:25  
 Date Received: 08/14/24 14:20

**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		08/15/24 09:15	08/15/24 20:50	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:15	08/15/24 20:50	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:15	08/15/24 20:50	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 20:50	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:15	08/15/24 20:50	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:15	08/15/24 20:50	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)	103		70 - 130				08/15/24 09:15	08/15/24 20:50	1
1,4-Difluorobenzene (Surr)	111		70 - 130				08/15/24 09:15	08/15/24 20:50	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	0.00399	0.00228	mg/Kg			08/15/24 20:50	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<15.0	U	49.6	15.0	mg/Kg			08/16/24 00:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<14.4	U	49.6	14.4	mg/Kg		08/14/24 17:23	08/16/24 00:16	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg		08/14/24 17:23	08/16/24 00:16	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg		08/14/24 17:23	08/16/24 00:16	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	309		5.05	0.399	mg/Kg			08/16/24 22:25	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-4 (4')**  
 Date Collected: 08/12/24 14:21  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-21**  
 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		08/15/24 09:19	08/15/24 23:59	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 09:19	08/15/24 23:59	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 09:19	08/15/24 23:59	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:19	08/15/24 23:59	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 09:19	08/15/24 23:59	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 09:19	08/15/24 23:59	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)	111		70 - 130				08/15/24 09:19	08/15/24 23:59	1
1,4-Difluorobenzene (Surr)	97		70 - 130				08/15/24 09:19	08/15/24 23:59	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	0.00399	0.00228	mg/Kg			08/15/24 23:59	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			08/14/24 18:09	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	<14.5	U	49.9	14.5	mg/Kg		08/14/24 17:21	08/14/24 18:09	1
Diesel Range Organics (Over C10-C28)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:21	08/14/24 18:09	1
Oil Range Organics (Over C28-C36)	<15.1	U	49.9	15.1	mg/Kg		08/14/24 17:21	08/14/24 18:09	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	80		70 - 130				08/14/24 17:21	08/14/24 18:09	1
<i>o</i> -Terphenyl	69	S1-	70 - 130				08/14/24 17:21	08/14/24 18:09	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101	F1	4.96	0.392	mg/Kg			08/16/24 22:33	1

**Client Sample ID: TT-2 (2')**

**Lab Sample ID: 880-47252-25**  
 Matrix: Solid

Date Collected: 08/13/24 00:00  
 Date Received: 08/14/24 14:20

## 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		08/15/24 11:24	08/16/24 06:46	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 11:24	08/16/24 06:46	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 11:24	08/16/24 06:46	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 11:24	08/16/24 06:46	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg		08/15/24 11:24	08/16/24 06:46	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 11:24	08/16/24 06:46	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)	118		70 - 130				08/15/24 11:24	08/16/24 06:46	1
1,4-Difluorobenzene (Surr)	103		70 - 130				08/15/24 11:24	08/16/24 06:46	1

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# Client Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-2 (2')**  
 Date Collected: 08/13/24 00:00  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-25**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00228	U	0.00399	0.00228	mg/Kg			08/16/24 06:46	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			08/14/24 19:33	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		08/14/24 17:21	08/14/24 19:33	1
Diesel Range Organics (Over C10-C28)	<15.0	U	49.6	15.0	mg/Kg		08/14/24 17:21	08/14/24 19:33	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.6	15.0	mg/Kg		08/14/24 17:21	08/14/24 19:33	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	159		4.98	0.393	mg/Kg			08/16/24 23:32	1

**Client Sample ID: TT-4 (3')**

**Lab Sample ID: 880-47259-21**

Date Collected: 08/12/24 12:27  
 Date Received: 08/14/24 14:20

**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		08/15/24 10:18	08/16/24 00:31	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg		08/15/24 10:18	08/16/24 00:31	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg		08/15/24 10:18	08/16/24 00:31	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg		08/15/24 10:18	08/16/24 00:31	1
<b>o-Xylene</b>	<b>0.0893</b>			0.00200	mg/Kg		08/15/24 10:18	08/16/24 00:31	1
<b>Xylenes, Total</b>	<b>0.0893</b>			0.00399	0.00228 mg/Kg		08/15/24 10:18	08/16/24 00:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0893		0.00399	0.00228	mg/Kg			08/16/24 00:31	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	17.4	J	49.7	15.0	mg/Kg			08/14/24 19:50	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	49.7	14.4	mg/Kg		08/14/24 17:21	08/14/24 19:50	1

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**Client Sample Results**

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

**Client Sample ID: TT-4 (3')****Lab Sample ID: 880-47259-21**

Matrix: Solid

Date Collected: 08/12/24 12:27

Date Received: 08/14/24 14:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	17.4	J	49.7	15.0	mg/Kg		08/14/24 17:21	08/14/24 19:50	1
Oil Range Organics (Over C28-C36)	<15.0	U	49.7	15.0	mg/Kg		08/14/24 17:21	08/14/24 19:50	1
<b>Surrogate</b>									
1-Chlorooctane									
84									
o-Terphenyl									
73									
<b>Method: EPA 300.0 - Anions, Ion Chromatography - Soluble</b>									

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	192		5.02	0.397	mg/Kg			08/17/24 04:23	1

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## Surrogate Summary

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

### 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)	
880-47252-1	H-5 (0-1')	89	117	
880-47252-1 MS	H-5 (0-1')	100	100	
880-47252-1 MSD	H-5 (0-1')	95	102	
880-47252-2	H-6 (0-1')	99	116	
880-47252-3	H-7 (0-1')	111	126	
880-47252-4	TT-1 (0-0.5')	106	115	
880-47252-5	TT-1 (1')	99	115	
880-47252-6	TT-1 (2')	105	108	
880-47252-7	TT-1 (3')	99	107	
880-47252-8	TT-1 (4')	101	109	
880-47252-9	TT-2 (0-0.5')	107	113	
880-47252-10	TT-2 (1')	100	112	
880-47252-11	TT-2 (3')	83	106	
880-47252-12	TT-2 (4')	116	121	
880-47252-13	TT-3 (0-0.5')	99	110	
880-47252-14	TT-3 (1')	108	109	
880-47252-15	TT-3 (2')	98	112	
880-47252-16	TT-3 (3')	103	114	
880-47252-17	TT-3 (4')	105	115	
880-47252-18	TT-4 (0-0.5')	95	120	
880-47252-19	TT-4 (1')	99	109	
880-47252-20	TT-4 (2')	103	111	
880-47252-21	TT-4 (4')	111	97	
880-47252-21 MS	TT-4 (4')	107	99	
880-47252-21 MSD	TT-4 (4')	107	99	
880-47252-25	TT-2 (2')	118	103	
880-47259-21	TT-4 (3')	125	118	
LCS 880-88479/1-A	Lab Control Sample	94	103	
LCS 880-88481/1-A	Lab Control Sample	102	98	
LCSD 880-88479/2-A	Lab Control Sample Dup	93	102	
LCSD 880-88481/2-A	Lab Control Sample Dup	101	98	
MB 880-88470/8	Method Blank	106	90	
MB 880-88479/5-A	Method Blank	125	98	
MB 880-88481/5-A	Method Blank	108	91	

**Surrogate Legend**

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		1CO1 (70-130)	OTPH1 (70-130)	
880-47215-A-1-H MS	Matrix Spike	88	87	
880-47215-A-1-I MSD	Matrix Spike Duplicate	87	83	
880-47252-1	H-5 (0-1')	84	78	
880-47252-1 MS	H-5 (0-1')	72	79	

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## Surrogate Summary

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Matrix: Solid****Prep Type: Total/NA**

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
880-47252-1 MSD	H-5 (0-1')	73	80
880-47252-2	H-6 (0-1')	92	84
880-47252-3	H-7 (0-1')	95	87
880-47252-4	TT-1 (0-0.5')	91	84
880-47252-5	TT-1 (1')	91	84
880-47252-6	TT-1 (2')	90	83
880-47252-7	TT-1 (3')	189 S1+	177 S1+
880-47252-8	TT-1 (4')	94	87
880-47252-9	TT-2 (0-0.5')	86	77
880-47252-10	TT-2 (1')	80	73
880-47252-11	TT-2 (3')	86	78
880-47252-12	TT-2 (4')	82	74
880-47252-13	TT-3 (0-0.5')	85	80
880-47252-14	TT-3 (1')	92	84
880-47252-15	TT-3 (2')	83	75
880-47252-16	TT-3 (3')	80	72
880-47252-17	TT-3 (4')	88	79
880-47252-18	TT-4 (0-0.5')	106	95
880-47252-19	TT-4 (1')	155 S1+	142 S1+
880-47252-20	TT-4 (2')	92	86
880-47252-21	TT-4 (4')	80	69 S1-
880-47252-25	TT-2 (2')	88	77
880-47259-21	TT-4 (3')	84	73
LCS 880-88397/2-A	Lab Control Sample	104	103
LCS 880-88454/2-A	Lab Control Sample	109	112
LCSD 880-88397/3-A	Lab Control Sample Dup	133 S1+	104
LCSD 880-88454/3-A	Lab Control Sample Dup	112	115
MB 880-88397/1-A	Method Blank	118	105
MB 880-88454/1-A	Method Blank	131 S1+	118

**Surrogate Legend**

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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**QC Sample Results**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

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

**Lab Sample ID:** MB 880-88470/8  
**Matrix:** Solid  
**Analysis Batch:** 88470

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

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg			08/15/24 11:36	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg			08/15/24 11:36	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg			08/15/24 11:36	1
m-Xylene & p-Xylene	<0.00229	U	0.00400	0.00229	mg/Kg			08/15/24 11:36	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg			08/15/24 11:36	1
Xylenes, Total	<0.00229	U	0.00400	0.00229	mg/Kg			08/15/24 11:36	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	106		70 - 130			1
1,4-Difluorobenzene (Surr)	90		70 - 130			1

**Lab Sample ID:** MB 880-88479/5-A  
**Matrix:** Solid  
**Analysis Batch:** 88473

**Client Sample ID:** Method Blank  
**Prep Type:** Total/NA  
**Prep Batch:** 88479

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.00139	U	0.00200	0.00139	mg/Kg			08/15/24 09:15	1
Toluene	<0.00200	U	0.00200	0.00200	mg/Kg			08/15/24 09:15	1
Ethylbenzene	<0.00109	U	0.00200	0.00109	mg/Kg			08/15/24 09:15	1
m-Xylene & p-Xylene	<0.00228	U	0.00399	0.00228	mg/Kg			08/15/24 09:15	1
o-Xylene	<0.00158	U	0.00200	0.00158	mg/Kg			08/15/24 09:15	1
Xylenes, Total	<0.00228	U	0.00399	0.00228	mg/Kg			08/15/24 09:15	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	125		70 - 130			1
1,4-Difluorobenzene (Surr)	98		70 - 130			1

**Lab Sample ID:** LCS 880-88479/1-A  
**Matrix:** Solid  
**Analysis Batch:** 88473

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 88479

Analyte	Spike		Result	LCS Qualifier	Unit	D	%Rec	Limits
	Added							
Benzene	0.100		0.1196		mg/Kg	120	70 - 130	
Toluene	0.100		0.1211		mg/Kg	121	70 - 130	
Ethylbenzene	0.100		0.1060		mg/Kg	106	70 - 130	
m-Xylene & p-Xylene	0.200		0.2310		mg/Kg	116	70 - 130	
o-Xylene	0.100		0.1279		mg/Kg	128	70 - 130	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	94		70 - 130			1
1,4-Difluorobenzene (Surr)	103		70 - 130			1

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**QC Sample Results**

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: LCSD 880-88479/2-A****Matrix: Solid****Analysis Batch: 88479****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88479**

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1213		mg/Kg	121	70 - 130	1	35	
Toluene	0.100	0.1255		mg/Kg	125	70 - 130	4	35	
Ethylbenzene	0.100	0.1170		mg/Kg	117	70 - 130	10	35	
m-Xylene & p-Xylene	0.200	0.2341		mg/Kg	117	70 - 130	1	35	
o-Xylene	0.100	0.1272		mg/Kg	127	70 - 130	1	35	
Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits						
4-Bromofluorobenzene (Surr)	93		70 - 130						
1,4-Difluorobenzene (Surr)	102		70 - 130						

**Lab Sample ID: 880-47252-1 MS****Matrix: Solid****Analysis Batch: 88479****Client Sample ID: H-5 (0-1')****Prep Type: Total/NA****Prep Batch: 88479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00140	U	0.100	0.1184		mg/Kg	118	70 - 130	
Toluene	<0.00201	U	0.100	0.1158		mg/Kg	116	70 - 130	
Ethylbenzene	<0.00109	U	0.100	0.1045		mg/Kg	104	70 - 130	
m-Xylene & p-Xylene	<0.00229	U	0.200	0.2102		mg/Kg	105	70 - 130	
o-Xylene	<0.00159	U F1	0.100	0.1305	F1	mg/Kg	131	70 - 130	
Surrogate	MS %Recovery	MS Qualifier	MS Limits						
4-Bromofluorobenzene (Surr)	100		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

**Lab Sample ID: 880-47252-1 MSD****Matrix: Solid****Analysis Batch: 88479****Client Sample ID: H-5 (0-1')****Prep Type: Total/NA****Prep Batch: 88479**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00140	U	0.100	0.1190		mg/Kg	119	70 - 130	0	35	
Toluene	<0.00201	U	0.100	0.1145		mg/Kg	115	70 - 130	1	35	
Ethylbenzene	<0.00109	U	0.100	0.1047		mg/Kg	105	70 - 130	0	35	
m-Xylene & p-Xylene	<0.00229	U	0.200	0.2190		mg/Kg	109	70 - 130	4	35	
o-Xylene	<0.00159	U F1	0.100	0.1214		mg/Kg	121	70 - 130	7	35	
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
4-Bromofluorobenzene (Surr)	95		70 - 130								
1,4-Difluorobenzene (Surr)	102		70 - 130								

**Lab Sample ID: MB 880-88481/5-A****Matrix: Solid****Analysis Batch: 88470****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88481**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00140	U	0.00201	0.00140	mg/Kg	08/15/24 09:19	08/15/24 23:37		1
Toluene	<0.00201	U	0.00201	0.00201	mg/Kg	08/15/24 09:19	08/15/24 23:37		1

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**QC Sample Results**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: MB 880-88481/5-A****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	MB		RL	MDL	Unit	D	Prepared		Dil Fac
	Result	Qualifier					Prepared	Analyzed	
Ethylbenzene	<0.00109	U	0.00201	0.00109	mg/Kg		08/15/24 09:19	08/15/24 23:37	1
m-Xylene & p-Xylene	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:19	08/15/24 23:37	1
o-Xylene	<0.00159	U	0.00201	0.00159	mg/Kg		08/15/24 09:19	08/15/24 23:37	1
Xylenes, Total	<0.00229	U	0.00402	0.00229	mg/Kg		08/15/24 09:19	08/15/24 23:37	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	108		70 - 130	08/15/24 09:19	08/15/24 23:37	1
1,4-Difluorobenzene (Surr)	91		70 - 130	08/15/24 09:19	08/15/24 23:37	1

**Lab Sample ID: LCS 880-88481/1-A****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	Spike		LCS	LCS	Unit	D	%Rec	
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1148		mg/Kg		115	70 - 130	
Toluene	0.100	0.1024		mg/Kg		102	70 - 130	
Ethylbenzene	0.100	0.1041		mg/Kg		104	70 - 130	
m-Xylene & p-Xylene	0.200	0.2199		mg/Kg		110	70 - 130	
o-Xylene	0.100	0.1094		mg/Kg		109	70 - 130	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	102		70 - 130			
1,4-Difluorobenzene (Surr)	98		70 - 130			

**Lab Sample ID: LCSD 880-88481/2-A****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: Lab Control Sample Dup**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec		RPD
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1200		mg/Kg		120	70 - 130	4	35
Toluene	0.100	0.1072		mg/Kg		107	70 - 130	5	35
Ethylbenzene	0.100	0.1097		mg/Kg		110	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2312		mg/Kg		116	70 - 130	5	35
o-Xylene	0.100	0.1143		mg/Kg		114	70 - 130	4	35

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	101		70 - 130			
1,4-Difluorobenzene (Surr)	98		70 - 130			

**Lab Sample ID: 880-47252-21 MS****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: TT-4 (4')**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	Sample		Spike	MS	MS	Unit	D	%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00139	U	0.100	0.1117		mg/Kg		112	70 - 130
Toluene	<0.00200	U	0.100	0.09878		mg/Kg		99	70 - 130
Ethylbenzene	<0.00109	U	0.100	0.09991		mg/Kg		100	70 - 130

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**QC Sample Results**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Method: 8021B - Volatile Organic Compounds (GC) (Continued)****Lab Sample ID: 880-47252-21 MS****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: TT-4 (4')**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
m-Xylene & p-Xylene	<0.00228	U	0.200	0.2101		mg/Kg	105	70 - 130	
o-Xylene	<0.00158	U	0.100	0.1034		mg/Kg	103	70 - 130	

**MS MS**  
**Surrogate** %Recovery Qualifier Limits

4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

**Lab Sample ID: 880-47252-21 MSD****Matrix: Solid****Analysis Batch: 88470**

**Client Sample ID: TT-4 (4')**  
**Prep Type: Total/NA**  
**Prep Batch: 88481**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD
Benzene	<0.00139	U	0.100	0.1121		mg/Kg	112	70 - 130	0 35
Toluene	<0.00200	U	0.100	0.09886		mg/Kg	99	70 - 130	0 35
Ethylbenzene	<0.00109	U	0.100	0.09921		mg/Kg	99	70 - 130	1 35
m-Xylene & p-Xylene	<0.00228	U	0.200	0.2097		mg/Kg	105	70 - 130	0 35
o-Xylene	<0.00158	U	0.100	0.1036		mg/Kg	104	70 - 130	0 35

**MSD MSD**  
**Surrogate** %Recovery Qualifier Limits

4-Bromofluorobenzene (Surr)	107	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

**Method: 8015B NM - Diesel Range Organics (DRO) (GC)****Lab Sample ID: MB 880-88397/1-A****Matrix: Solid****Analysis Batch: 88413**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 88397**

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	08/14/24 08:05	08/14/24 08:46		1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg	08/14/24 08:05	08/14/24 08:46		1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg	08/14/24 08:05	08/14/24 08:46		1

**MB MB**  
**Surrogate** %Recovery Qualifier Limits

1-Chlorooctane	118	70 - 130
o-Terphenyl	105	70 - 130

**Lab Sample ID: LCS 880-88397/2-A****Matrix: Solid****Analysis Batch: 88413**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 88397**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec
Gasoline Range Organics (GRO)-C6-C10	1000	1107		mg/Kg	111	70 - 130
Diesel Range Organics (Over C10-C28)	1000	979.1		mg/Kg	98	70 - 130

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## QC Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

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

**Lab Sample ID:** LCS 880-88397/2-A

**Matrix:** Solid

**Analysis Batch:** 88413

**Client Sample ID:** Lab Control Sample  
**Prep Type:** Total/NA  
**Prep Batch:** 88397

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	103		70 - 130

**Lab Sample ID:** LCSD 880-88397/3-A

**Matrix:** Solid

**Analysis Batch:** 88413

**Client Sample ID:** Lab Control Sample Dup  
**Prep Type:** Total/NA  
**Prep Batch:** 88397

Analyte		Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10		1000	1123		mg/Kg		112	70 - 130	1	20
Diesel Range Organics (Over C10-C28)		1000	896.4		mg/Kg		90	70 - 130	9	20

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	133	S1+	70 - 130
o-Terphenyl	104		70 - 130

**Lab Sample ID:** 880-47215-A-1-H MS

**Matrix:** Solid

**Analysis Batch:** 88413

**Client Sample ID:** Matrix Spike  
**Prep Type:** Total/NA  
**Prep Batch:** 88397

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	1000	961.7		mg/Kg		96	70 - 130	
Diesel Range Organics (Over C10-C28)	<15.3	U	1000	857.4		mg/Kg		85	70 - 130	

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	88		70 - 130
o-Terphenyl	87		70 - 130

**Lab Sample ID:** 880-47215-A-1-I MSD

**Matrix:** Solid

**Analysis Batch:** 88413

**Client Sample ID:** Matrix Spike Duplicate  
**Prep Type:** Total/NA  
**Prep Batch:** 88397

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	<14.6	U	1000	952.9		mg/Kg		95	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<15.3	U	1000	827.5		mg/Kg		82	70 - 130	4	20

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	87		70 - 130
o-Terphenyl	83		70 - 130

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**QC Sample Results**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Method: 8015B NM - Diesel Range Organics (DRO) (GC) (Continued)****Lab Sample ID: MB 880-88454/1-A****Matrix: Solid****Analysis Batch: 88506****Client Sample ID: Method Blank****Prep Type: Total/NA****Prep Batch: 88454**

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	08/14/24 17:23	08/15/24 06:18		1
Diesel Range Organics (Over C10-C28)	<15.1	U	50.0	15.1	mg/Kg	08/14/24 17:23	08/15/24 06:18		1
Oil Range Organics (Over C28-C36)	<15.1	U	50.0	15.1	mg/Kg	08/14/24 17:23	08/15/24 06:18		1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	131	S1+	70 - 130	08/14/24 17:23	08/15/24 06:18	1			
<i>o</i> -Terphenyl	118		70 - 130	08/14/24 17:23	08/15/24 06:18	1			

**Lab Sample ID: LCS 880-88454/2-A****Matrix: Solid****Analysis Batch: 88506****Client Sample ID: Lab Control Sample****Prep Type: Total/NA****Prep Batch: 88454**

Analyte	Spike		LCS	LCS	Unit	D	%Rec	Limits	%Rec
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10		1000	1120		mg/Kg	112	70 - 130		
Diesel Range Organics (Over C10-C28)		1000	1046		mg/Kg	105	70 - 130		
Surrogate	LCS	LCS	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	109		70 - 130	08/14/24 17:23	08/15/24 06:18	1			
<i>o</i> -Terphenyl	112		70 - 130	08/14/24 17:23	08/15/24 06:18	1			

**Lab Sample ID: LCSD 880-88454/3-A****Matrix: Solid****Analysis Batch: 88506****Client Sample ID: Lab Control Sample Dup****Prep Type: Total/NA****Prep Batch: 88454**

Analyte	Spike		LCSD	LCSD	Unit	D	%Rec	Limits	RPD
	Added	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10		1000	1174		mg/Kg	117	70 - 130		5
Diesel Range Organics (Over C10-C28)		1000	1053		mg/Kg	105	70 - 130		1
Surrogate	LCSD	LCSD	Limits	Prepared	Analyzed	Dil Fac	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
1-Chlorooctane	112		70 - 130	08/14/24 17:23	08/15/24 06:18	1			
<i>o</i> -Terphenyl	115		70 - 130	08/14/24 17:23	08/15/24 06:18	1			

**Lab Sample ID: 880-47252-1 MS****Matrix: Solid****Analysis Batch: 88506****Client Sample ID: H-5 (0-1')****Prep Type: Total/NA****Prep Batch: 88454**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier		Result	Qualifier	Unit			
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	995	1060		mg/Kg	106	70 - 130	
Diesel Range Organics (Over C10-C28)	<15.2	U	995	981.0		mg/Kg	99	70 - 130	

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## QC Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

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

**Lab Sample ID:** 880-47252-1 MS

**Matrix:** Solid

**Analysis Batch:** 88506

**Client Sample ID:** H-5 (0-1')  
**Prep Type:** Total/NA  
**Prep Batch:** 88454

Surrogate	MS	MS	%Recovery	Qualifier	Limits
1-Chlorooctane	72				70 - 130
o-Terphenyl	79				70 - 130

**Lab Sample ID:** 880-47252-1 MSD

**Matrix:** Solid

**Analysis Batch:** 88506

**Client Sample ID:** H-5 (0-1')  
**Prep Type:** Total/NA  
**Prep Batch:** 88454

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<14.6	U	995	1092		mg/Kg	110	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<15.2	U	995	1010		mg/Kg	102	70 - 130	3	20

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
1-Chlorooctane	73				70 - 130
o-Terphenyl	80				70 - 130

### Method: 300.0 - Anions, Ion Chromatography

**Lab Sample ID:** MB 880-88480/1-A

**Matrix:** Solid

**Analysis Batch:** 88495

**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	5.00	0.395	mg/Kg			08/15/24 23:41	1

**Lab Sample ID:** LCS 880-88480/2-A

**Matrix:** Solid

**Analysis Batch:** 88495

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	252.4		mg/Kg	101	90 - 110	

**Lab Sample ID:** LCSD 880-88480/3-A

**Matrix:** Solid

**Analysis Batch:** 88495

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
Chloride	250	255.1		mg/Kg	102	90 - 110	1	20

**Lab Sample ID:** 880-47252-1 MS

**Matrix:** Solid

**Analysis Batch:** 88495

**Client Sample ID:** H-5 (0-1')  
**Prep Type:** Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	RPD	Limit
Chloride	184		249	423.8		mg/Kg	96	90 - 110	1	20

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## QC Sample Results

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

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

**Lab Sample ID: 880-47252-1 MSD**

**Matrix: Solid**

**Analysis Batch: 88495**

**Client Sample ID: H-5 (0-1')**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	184		249	423.1		mg/Kg		96	90 - 110	0	20

**Lab Sample ID: 880-47252-11 MS**

**Matrix: Solid**

**Analysis Batch: 88530**

**Client Sample ID: TT-2 (3')**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	222		248	475.9		mg/Kg		102	90 - 110

**Lab Sample ID: 880-47252-11 MSD**

**Matrix: Solid**

**Analysis Batch: 88530**

**Client Sample ID: TT-2 (3')**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	222		248	478.7		mg/Kg		103	90 - 110	1	20

**Lab Sample ID: 880-47252-21 MS**

**Matrix: Solid**

**Analysis Batch: 88530**

**Client Sample ID: TT-4 (4')**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	101	F1	248	320.4	F1	mg/Kg		88	90 - 110

**Lab Sample ID: 880-47252-21 MSD**

**Matrix: Solid**

**Analysis Batch: 88530**

**Client Sample ID: TT-4 (4')**  
**Prep Type: Soluble**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	101	F1	248	320.2	F1	mg/Kg		88	90 - 110	0	20

# QC Association Summary

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

## GC VOA

### Analysis Batch: 88470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-21	TT-4 (4')	Total/NA	Solid	8021B	88481
MB 880-88470/8	Method Blank	Total/NA	Solid	8021B	
MB 880-88481/5-A	Method Blank	Total/NA	Solid	8021B	88481
LCS 880-88481/1-A	Lab Control Sample	Total/NA	Solid	8021B	88481
LCSD 880-88481/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88481
880-47252-21 MS	TT-4 (4')	Total/NA	Solid	8021B	88481
880-47252-21 MSD	TT-4 (4')	Total/NA	Solid	8021B	88481

### Analysis Batch: 88471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-25	TT-2 (2')	Total/NA	Solid	8021B	88510

### Analysis Batch: 88473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	8021B	88479
880-47252-2	H-6 (0-1')	Total/NA	Solid	8021B	88479
880-47252-3	H-7 (0-1')	Total/NA	Solid	8021B	88479
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	8021B	88479
880-47252-5	TT-1 (1')	Total/NA	Solid	8021B	88479
880-47252-6	TT-1 (2')	Total/NA	Solid	8021B	88479
880-47252-7	TT-1 (3')	Total/NA	Solid	8021B	88479
880-47252-8	TT-1 (4')	Total/NA	Solid	8021B	88479
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	8021B	88479
880-47252-10	TT-2 (1')	Total/NA	Solid	8021B	88479
880-47252-11	TT-2 (3')	Total/NA	Solid	8021B	88479
880-47252-12	TT-2 (4')	Total/NA	Solid	8021B	88479
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	8021B	88479
880-47252-14	TT-3 (1')	Total/NA	Solid	8021B	88479
880-47252-15	TT-3 (2')	Total/NA	Solid	8021B	88479
880-47252-16	TT-3 (3')	Total/NA	Solid	8021B	88479
880-47252-17	TT-3 (4')	Total/NA	Solid	8021B	88479
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	8021B	88479
880-47252-19	TT-4 (1')	Total/NA	Solid	8021B	88479
880-47252-20	TT-4 (2')	Total/NA	Solid	8021B	88479
MB 880-88479/5-A	Method Blank	Total/NA	Solid	8021B	88479
LCS 880-88479/1-A	Lab Control Sample	Total/NA	Solid	8021B	88479
LCSD 880-88479/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	88479
880-47252-1 MS	H-5 (0-1')	Total/NA	Solid	8021B	88479
880-47252-1 MSD	H-5 (0-1')	Total/NA	Solid	8021B	88479

### Analysis Batch: 88475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Total/NA	Solid	8021B	88489

### Prep Batch: 88479

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	5035	
880-47252-2	H-6 (0-1')	Total/NA	Solid	5035	
880-47252-3	H-7 (0-1')	Total/NA	Solid	5035	
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	5035	

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## QC Association Summary

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

### GC VOA (Continued)

#### Prep Batch: 88479 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-5	TT-1 (1')	Total/NA	Solid	5035	5
880-47252-6	TT-1 (2')	Total/NA	Solid	5035	6
880-47252-7	TT-1 (3')	Total/NA	Solid	5035	7
880-47252-8	TT-1 (4')	Total/NA	Solid	5035	8
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	5035	9
880-47252-10	TT-2 (1')	Total/NA	Solid	5035	10
880-47252-11	TT-2 (3')	Total/NA	Solid	5035	11
880-47252-12	TT-2 (4')	Total/NA	Solid	5035	12
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	5035	13
880-47252-14	TT-3 (1')	Total/NA	Solid	5035	14
880-47252-15	TT-3 (2')	Total/NA	Solid	5035	15
880-47252-16	TT-3 (3')	Total/NA	Solid	5035	16
880-47252-17	TT-3 (4')	Total/NA	Solid	5035	17
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	5035	18
880-47252-19	TT-4 (1')	Total/NA	Solid	5035	19
880-47252-20	TT-4 (2')	Total/NA	Solid	5035	20
MB 880-88479/5-A	Method Blank	Total/NA	Solid	5035	21
LCS 880-88479/1-A	Lab Control Sample	Total/NA	Solid	5035	22
LCSD 880-88479/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	23
880-47252-1 MS	H-5 (0-1')	Total/NA	Solid	5035	24
880-47252-1 MSD	H-5 (0-1')	Total/NA	Solid	5035	25

#### Prep Batch: 88481

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-21	TT-4 (4')	Total/NA	Solid	5035	1
MB 880-88481/5-A	Method Blank	Total/NA	Solid	5035	2
LCS 880-88481/1-A	Lab Control Sample	Total/NA	Solid	5035	3
LCSD 880-88481/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	4
880-47252-21 MS	TT-4 (4')	Total/NA	Solid	5035	5
880-47252-21 MSD	TT-4 (4')	Total/NA	Solid	5035	6

#### Prep Batch: 88489

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Total/NA	Solid	5035	1

#### Prep Batch: 88510

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-25	TT-2 (2')	Total/NA	Solid	5035	1

#### Analysis Batch: 88606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	Total BTEX	1
880-47252-2	H-6 (0-1')	Total/NA	Solid	Total BTEX	2
880-47252-3	H-7 (0-1')	Total/NA	Solid	Total BTEX	3
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	Total BTEX	4
880-47252-5	TT-1 (1')	Total/NA	Solid	Total BTEX	5
880-47252-6	TT-1 (2')	Total/NA	Solid	Total BTEX	6
880-47252-7	TT-1 (3')	Total/NA	Solid	Total BTEX	7
880-47252-8	TT-1 (4')	Total/NA	Solid	Total BTEX	8
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	Total BTEX	9

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## QC Association Summary

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

### GC VOA (Continued)

#### Analysis Batch: 88606 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-10	TT-2 (1')	Total/NA	Solid	Total BTEX	5
880-47252-11	TT-2 (3')	Total/NA	Solid	Total BTEX	6
880-47252-12	TT-2 (4')	Total/NA	Solid	Total BTEX	7
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	Total BTEX	8
880-47252-14	TT-3 (1')	Total/NA	Solid	Total BTEX	9
880-47252-15	TT-3 (2')	Total/NA	Solid	Total BTEX	10
880-47252-16	TT-3 (3')	Total/NA	Solid	Total BTEX	11
880-47252-17	TT-3 (4')	Total/NA	Solid	Total BTEX	12
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	Total BTEX	13
880-47252-19	TT-4 (1')	Total/NA	Solid	Total BTEX	14
880-47252-20	TT-4 (2')	Total/NA	Solid	Total BTEX	1
880-47252-21	TT-4 (4')	Total/NA	Solid	Total BTEX	2
880-47252-25	TT-2 (2')	Total/NA	Solid	Total BTEX	3

#### Analysis Batch: 88616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Total/NA	Solid	Total BTEX	12

### GC Semi VOA

#### Prep Batch: 88397

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-21	TT-4 (4')	Total/NA	Solid	8015NM Prep	1
880-47252-25	TT-2 (2')	Total/NA	Solid	8015NM Prep	2
880-47259-21	TT-4 (3')	Total/NA	Solid	8015NM Prep	3
MB 880-88397/1-A	Method Blank	Total/NA	Solid	8015NM Prep	4
LCS 880-88397/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	5
LCSD 880-88397/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	6
880-47215-A-1-H MS	Matrix Spike	Total/NA	Solid	8015NM Prep	7
880-47215-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	8

#### Analysis Batch: 88413

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-21	TT-4 (4')	Total/NA	Solid	8015B NM	88397
880-47252-25	TT-2 (2')	Total/NA	Solid	8015B NM	88397
880-47259-21	TT-4 (3')	Total/NA	Solid	8015B NM	88397
MB 880-88397/1-A	Method Blank	Total/NA	Solid	8015B NM	88397
LCS 880-88397/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	88397
LCSD 880-88397/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	88397
880-47215-A-1-H MS	Matrix Spike	Total/NA	Solid	8015B NM	88397
880-47215-A-1-I MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	88397

#### Prep Batch: 88454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	8015NM Prep	1
880-47252-2	H-6 (0-1')	Total/NA	Solid	8015NM Prep	2
880-47252-3	H-7 (0-1')	Total/NA	Solid	8015NM Prep	3
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	8015NM Prep	4
880-47252-5	TT-1 (1')	Total/NA	Solid	8015NM Prep	5
880-47252-6	TT-1 (2')	Total/NA	Solid	8015NM Prep	6

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**QC Association Summary**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**GC Semi VOA (Continued)****Prep Batch: 88454 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-7	TT-1 (3')	Total/NA	Solid	8015NM Prep	5
880-47252-8	TT-1 (4')	Total/NA	Solid	8015NM Prep	6
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	8015NM Prep	7
880-47252-10	TT-2 (1')	Total/NA	Solid	8015NM Prep	8
880-47252-11	TT-2 (3')	Total/NA	Solid	8015NM Prep	9
880-47252-12	TT-2 (4')	Total/NA	Solid	8015NM Prep	10
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	8015NM Prep	11
880-47252-14	TT-3 (1')	Total/NA	Solid	8015NM Prep	12
880-47252-15	TT-3 (2')	Total/NA	Solid	8015NM Prep	13
880-47252-16	TT-3 (3')	Total/NA	Solid	8015NM Prep	14
880-47252-17	TT-3 (4')	Total/NA	Solid	8015NM Prep	
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	8015NM Prep	
880-47252-19	TT-4 (1')	Total/NA	Solid	8015NM Prep	
880-47252-20	TT-4 (2')	Total/NA	Solid	8015NM Prep	
MB 880-88454/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-88454/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-88454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-47252-1 MS	H-5 (0-1')	Total/NA	Solid	8015NM Prep	
880-47252-1 MSD	H-5 (0-1')	Total/NA	Solid	8015NM Prep	

**Analysis Batch: 88506**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	8015B NM	88454
880-47252-2	H-6 (0-1')	Total/NA	Solid	8015B NM	88454
880-47252-3	H-7 (0-1')	Total/NA	Solid	8015B NM	88454
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	8015B NM	88454
880-47252-5	TT-1 (1')	Total/NA	Solid	8015B NM	88454
880-47252-6	TT-1 (2')	Total/NA	Solid	8015B NM	88454
880-47252-7	TT-1 (3')	Total/NA	Solid	8015B NM	88454
880-47252-8	TT-1 (4')	Total/NA	Solid	8015B NM	88454
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	8015B NM	88454
880-47252-10	TT-2 (1')	Total/NA	Solid	8015B NM	88454
880-47252-11	TT-2 (3')	Total/NA	Solid	8015B NM	88454
880-47252-12	TT-2 (4')	Total/NA	Solid	8015B NM	88454
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	8015B NM	88454
880-47252-14	TT-3 (1')	Total/NA	Solid	8015B NM	88454
880-47252-15	TT-3 (2')	Total/NA	Solid	8015B NM	88454
880-47252-16	TT-3 (3')	Total/NA	Solid	8015B NM	88454
880-47252-17	TT-3 (4')	Total/NA	Solid	8015B NM	88454
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	8015B NM	88454
880-47252-19	TT-4 (1')	Total/NA	Solid	8015B NM	88454
880-47252-20	TT-4 (2')	Total/NA	Solid	8015B NM	88454
MB 880-88454/1-A	Method Blank	Total/NA	Solid	8015B NM	88454
LCS 880-88454/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	88454
LCSD 880-88454/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	88454
880-47252-1 MS	H-5 (0-1')	Total/NA	Solid	8015B NM	88454
880-47252-1 MSD	H-5 (0-1')	Total/NA	Solid	8015B NM	88454

Eurofins Midland

## QC Association Summary

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

### GC Semi VOA

#### Analysis Batch: 88523

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Total/NA	Solid	8015 NM	5
880-47252-2	H-6 (0-1')	Total/NA	Solid	8015 NM	6
880-47252-3	H-7 (0-1')	Total/NA	Solid	8015 NM	7
880-47252-4	TT-1 (0-0.5')	Total/NA	Solid	8015 NM	8
880-47252-5	TT-1 (1')	Total/NA	Solid	8015 NM	9
880-47252-6	TT-1 (2')	Total/NA	Solid	8015 NM	10
880-47252-7	TT-1 (3')	Total/NA	Solid	8015 NM	11
880-47252-8	TT-1 (4')	Total/NA	Solid	8015 NM	12
880-47252-9	TT-2 (0-0.5')	Total/NA	Solid	8015 NM	13
880-47252-10	TT-2 (1')	Total/NA	Solid	8015 NM	14
880-47252-11	TT-2 (3')	Total/NA	Solid	8015 NM	
880-47252-12	TT-2 (4')	Total/NA	Solid	8015 NM	
880-47252-13	TT-3 (0-0.5')	Total/NA	Solid	8015 NM	
880-47252-14	TT-3 (1')	Total/NA	Solid	8015 NM	
880-47252-15	TT-3 (2')	Total/NA	Solid	8015 NM	
880-47252-16	TT-3 (3')	Total/NA	Solid	8015 NM	
880-47252-17	TT-3 (4')	Total/NA	Solid	8015 NM	
880-47252-18	TT-4 (0-0.5')	Total/NA	Solid	8015 NM	
880-47252-19	TT-4 (1')	Total/NA	Solid	8015 NM	
880-47252-20	TT-4 (2')	Total/NA	Solid	8015 NM	
880-47252-21	TT-4 (4')	Total/NA	Solid	8015 NM	
880-47252-25	TT-2 (2')	Total/NA	Solid	8015 NM	

#### Analysis Batch: 88524

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Total/NA	Solid	8015 NM	

### HPLC/IC

#### Leach Batch: 88480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Soluble	Solid	DI Leach	
880-47252-2	H-6 (0-1')	Soluble	Solid	DI Leach	
880-47252-3	H-7 (0-1')	Soluble	Solid	DI Leach	
880-47252-4	TT-1 (0-0.5')	Soluble	Solid	DI Leach	
880-47252-5	TT-1 (1')	Soluble	Solid	DI Leach	
880-47252-6	TT-1 (2')	Soluble	Solid	DI Leach	
880-47252-7	TT-1 (3')	Soluble	Solid	DI Leach	
880-47252-8	TT-1 (4')	Soluble	Solid	DI Leach	
880-47252-9	TT-2 (0-0.5')	Soluble	Solid	DI Leach	
880-47252-10	TT-2 (1')	Soluble	Solid	DI Leach	
MB 880-88480/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-88480/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-88480/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-47252-1 MS	H-5 (0-1')	Soluble	Solid	DI Leach	
880-47252-1 MSD	H-5 (0-1')	Soluble	Solid	DI Leach	

#### Analysis Batch: 88495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-1	H-5 (0-1')	Soluble	Solid	300.0	88480

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**QC Association Summary**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**HPLC/IC (Continued)****Analysis Batch: 88495 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-2	H-6 (0-1')	Soluble	Solid	300.0	88480
880-47252-3	H-7 (0-1')	Soluble	Solid	300.0	88480
880-47252-4	TT-1 (0-0.5')	Soluble	Solid	300.0	88480
880-47252-5	TT-1 (1')	Soluble	Solid	300.0	88480
880-47252-6	TT-1 (2')	Soluble	Solid	300.0	88480
880-47252-7	TT-1 (3')	Soluble	Solid	300.0	88480
880-47252-8	TT-1 (4')	Soluble	Solid	300.0	88480
880-47252-9	TT-2 (0-0.5')	Soluble	Solid	300.0	88480
880-47252-10	TT-2 (1')	Soluble	Solid	300.0	88480
MB 880-88480/1-A	Method Blank	Soluble	Solid	300.0	88480
LCS 880-88480/2-A	Lab Control Sample	Soluble	Solid	300.0	88480
LCSD 880-88480/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	88480
880-47252-1 MS	H-5 (0-1')	Soluble	Solid	300.0	88480
880-47252-1 MSD	H-5 (0-1')	Soluble	Solid	300.0	88480

**Leach Batch: 88497**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-11	TT-2 (3')	Soluble	Solid	DI Leach	13
880-47252-12	TT-2 (4')	Soluble	Solid	DI Leach	14
880-47252-13	TT-3 (0-0.5')	Soluble	Solid	DI Leach	
880-47252-14	TT-3 (1')	Soluble	Solid	DI Leach	
880-47252-15	TT-3 (2')	Soluble	Solid	DI Leach	
880-47252-16	TT-3 (3')	Soluble	Solid	DI Leach	
880-47252-17	TT-3 (4')	Soluble	Solid	DI Leach	
880-47252-18	TT-4 (0-0.5')	Soluble	Solid	DI Leach	
880-47252-19	TT-4 (1')	Soluble	Solid	DI Leach	
880-47252-20	TT-4 (2')	Soluble	Solid	DI Leach	
880-47252-21	TT-4 (4')	Soluble	Solid	DI Leach	
880-47252-25	TT-2 (2')	Soluble	Solid	DI Leach	
880-47252-11 MS	TT-2 (3')	Soluble	Solid	DI Leach	
880-47252-11 MSD	TT-2 (3')	Soluble	Solid	DI Leach	
880-47252-21 MS	TT-4 (4')	Soluble	Solid	DI Leach	
880-47252-21 MSD	TT-4 (4')	Soluble	Solid	DI Leach	

**Leach Batch: 88499**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Soluble	Solid	DI Leach	

**Analysis Batch: 88530**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-11	TT-2 (3')	Soluble	Solid	300.0	88497
880-47252-12	TT-2 (4')	Soluble	Solid	300.0	88497
880-47252-13	TT-3 (0-0.5')	Soluble	Solid	300.0	88497
880-47252-14	TT-3 (1')	Soluble	Solid	300.0	88497
880-47252-15	TT-3 (2')	Soluble	Solid	300.0	88497
880-47252-16	TT-3 (3')	Soluble	Solid	300.0	88497
880-47252-17	TT-3 (4')	Soluble	Solid	300.0	88497
880-47252-18	TT-4 (0-0.5')	Soluble	Solid	300.0	88497
880-47252-19	TT-4 (1')	Soluble	Solid	300.0	88497
880-47252-20	TT-4 (2')	Soluble	Solid	300.0	88497

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**QC Association Summary**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**HPLC/IC (Continued)****Analysis Batch: 88530 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47252-21	TT-4 (4')	Soluble	Solid	300.0	88497
880-47252-25	TT-2 (2')	Soluble	Solid	300.0	88497
880-47252-11 MS	TT-2 (3')	Soluble	Solid	300.0	88497
880-47252-11 MSD	TT-2 (3')	Soluble	Solid	300.0	88497
880-47252-21 MS	TT-4 (4')	Soluble	Solid	300.0	88497
880-47252-21 MSD	TT-4 (4')	Soluble	Solid	300.0	88497

**Analysis Batch: 88693**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-47259-21	TT-4 (3')	Soluble	Solid	300.0	88499

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## Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: H-5 (0-1')**

Date Collected: 08/13/24 11:50  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-1**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 12:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 12:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 18:07	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 18:07	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 01:45	CH	EET MID

**Client Sample ID: H-6 (0-1')**

Date Collected: 08/12/24 11:10  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-2**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 13:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 13:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 19:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 19:01	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:07	CH	EET MID

**Client Sample ID: H-7 (0-1')**

Date Collected: 08/12/24 11:32  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-3**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 13:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 13:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 19:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 19:19	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:14	CH	EET MID

**Client Sample ID: TT-1 (0-0.5')**

Date Collected: 08/13/24 12:15  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-4**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 13:50	MNR	EET MID

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## Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-1 (0-0.5')**

Date Collected: 08/13/24 12:15  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-4**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 13:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 19:37	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 19:37	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:37	CH	EET MID

**Client Sample ID: TT-1 (1')**

Date Collected: 08/13/24 12:17  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-5**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 14:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 14:10	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 19:54	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 19:54	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:44	CH	EET MID

**Client Sample ID: TT-1 (2')**

Date Collected: 08/13/24 12:19  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-6**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 14:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 14:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 20:11	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 20:11	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:51	CH	EET MID

**Client Sample ID: TT-1 (3')**

Date Collected: 08/13/24 12:22  
 Date Received: 08/14/24 14:20

**Lab Sample ID: 880-47252-7**  
 Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 14:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 14:51	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 20:28	SM	EET MID

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## Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-1 (3')**  
**Date Collected: 08/13/24 12:22**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-7**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 20:28	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 02:59	CH	EET MID

**Client Sample ID: TT-1 (4')**  
**Date Collected: 08/13/24 12:25**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-8**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 15:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 15:12	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 20:45	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 20:45	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 03:06	CH	EET MID

**Client Sample ID: TT-2 (0-0.5')**  
**Date Collected: 08/13/24 12:41**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-9**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 15:33	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 15:33	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 21:02	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 21:02	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 03:13	CH	EET MID

**Client Sample ID: TT-2 (1')**  
**Date Collected: 08/13/24 12:43**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 15:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 15:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 21:19	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 21:19	AJ	EET MID

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## Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-2 (1')**  
**Date Collected: 08/13/24 12:43**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-10**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.95 g	50 mL	88480	08/15/24 09:18	SI	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88495	08/16/24 03:20	CH	EET MID

**Client Sample ID: TT-2 (3')**  
**Date Collected: 08/13/24 12:47**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-11**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 17:44	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 17:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 21:51	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 21:51	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 20:15	SMC	EET MID

**Client Sample ID: TT-2 (4')**  
**Date Collected: 08/13/24 12:52**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-12**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 18:05	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 18:05	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 22:08	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 22:08	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 20:35	SMC	EET MID

**Client Sample ID: TT-3 (0-0.5')**  
**Date Collected: 08/13/24 13:10**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-13**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 18:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 18:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 22:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 22:24	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 21:19	SMC	EET MID

Eurofins Midland

## Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-3 (1')**  
**Date Collected: 08/13/24 13:11**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-14**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 18:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 18:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 22:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 22:40	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 21:26	SMC	EET MID

**Client Sample ID: TT-3 (2')**  
**Date Collected: 08/13/24 13:15**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-15**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 19:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 19:07	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 22:56	SM	EET MID
Total/NA	Prep	8015NM Prep			9.97 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 22:56	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 21:34	SMC	EET MID

**Client Sample ID: TT-3 (3')**  
**Date Collected: 08/13/24 13:18**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-16**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 19:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 19:27	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 23:12	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 23:12	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 21:56	SMC	EET MID

**Client Sample ID: TT-3 (4')**  
**Date Collected: 08/13/24 13:22**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-17**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 19:48	MNR	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-3 (4')**  
**Date Collected: 08/13/24 13:22**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-17**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 19:48	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 23:28	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 23:28	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 22:03	SMC	EET MID

**Client Sample ID: TT-4 (0-0.5')**  
**Date Collected: 08/12/24 12:20**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-18**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 20:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 20:09	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/15/24 23:44	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/15/24 23:44	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	88530	08/16/24 22:11	SMC	EET MID

**Client Sample ID: TT-4 (1')**  
**Date Collected: 08/12/24 12:22**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-19**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 20:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 20:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/16/24 00:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/16/24 00:01	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 22:18	SMC	EET MID

**Client Sample ID: TT-4 (2')**  
**Date Collected: 08/12/24 12:25**  
**Date Received: 08/14/24 14:20**

**Lab Sample ID: 880-47252-20**  
**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	88479	08/15/24 09:15	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88473	08/15/24 20:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 20:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/16/24 00:16	SM	EET MID

Eurofins Midland

# Lab Chronicle

Client: Tetra Tech Inc  
 Project/Site: Cicada Unit 022H Delineation Assessment  
 Release 1

Job ID: 880-47252-1  
 SDG: Eddy County,

**Client Sample ID: TT-4 (2')****Lab Sample ID: 880-47252-20**

Matrix: Solid

Date Collected: 08/12/24 12:25  
 Date Received: 08/14/24 14:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	88454	08/14/24 17:23	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88506	08/16/24 00:16	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 22:25	SMC	EET MID

**Client Sample ID: TT-4 (4')****Lab Sample ID: 880-47252-21**

Matrix: Solid

Date Collected: 08/12/24 14:21  
 Date Received: 08/14/24 14:20

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	88481	08/15/24 09:19	AA	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88470	08/15/24 23:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/15/24 23:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/14/24 18:09	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	88397	08/14/24 17:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88413	08/14/24 18:09	TKC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 22:33	SMC	EET MID

**Client Sample ID: TT-2 (2')****Lab Sample ID: 880-47252-25**

Matrix: Solid

Date Collected: 08/13/24 00:00  
 Date Received: 08/14/24 14:20

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	88510	08/15/24 11:24	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88471	08/16/24 06:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88606	08/16/24 06:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			88523	08/14/24 19:33	SM	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	88397	08/14/24 17:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88413	08/14/24 19:33	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	88497	08/15/24 10:42	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88530	08/16/24 23:32	SMC	EET MID

**Client Sample ID: TT-4 (3')****Lab Sample ID: 880-47259-21**

Matrix: Solid

Date Collected: 08/12/24 12:27  
 Date Received: 08/14/24 14:20

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	88489	08/15/24 10:18	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	88475	08/16/24 00:31	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			88616	08/16/24 00:31	SM	EET MID
Total/NA	Analysis	8015 NM		1			88524	08/14/24 19:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	88397	08/14/24 17:21	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	88413	08/14/24 19:50	TKC	EET MID

Eurofins Midland

**Lab Chronicle**

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

**Client Sample ID: TT-4 (3')****Lab Sample ID: 880-47259-21**

Matrix: Solid

Date Collected: 08/12/24 12:27

Date Received: 08/14/24 14:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	88499	08/15/24 10:46	SA	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	88693	08/17/24 04:23	SMC	EET MID

**Laboratory References:**

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

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Eurofins Midland

## Accreditation/Certification Summary

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

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



Eurofins Midland

## Method Summary

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

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

Eurofins Midland

## Sample Summary

Client: Tetra Tech Inc

Project/Site: Cicada Unit 022H Delineation Assessment

Release 1

Job ID: 880-47252-1

SDG: Eddy County,

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
880-47252-1	H-5 (0-1')	Solid	08/13/24 11:50	08/14/24 14:20
880-47252-2	H-6 (0-1')	Solid	08/12/24 11:10	08/14/24 14:20
880-47252-3	H-7 (0-1')	Solid	08/12/24 11:32	08/14/24 14:20
880-47252-4	TT-1 (0-0.5')	Solid	08/13/24 12:15	08/14/24 14:20
880-47252-5	TT-1 (1')	Solid	08/13/24 12:17	08/14/24 14:20
880-47252-6	TT-1 (2')	Solid	08/13/24 12:19	08/14/24 14:20
880-47252-7	TT-1 (3')	Solid	08/13/24 12:22	08/14/24 14:20
880-47252-8	TT-1 (4')	Solid	08/13/24 12:25	08/14/24 14:20
880-47252-9	TT-2 (0-0.5')	Solid	08/13/24 12:41	08/14/24 14:20
880-47252-10	TT-2 (1')	Solid	08/13/24 12:43	08/14/24 14:20
880-47252-11	TT-2 (3')	Solid	08/13/24 12:47	08/14/24 14:20
880-47252-12	TT-2 (4')	Solid	08/13/24 12:52	08/14/24 14:20
880-47252-13	TT-3 (0-0.5')	Solid	08/13/24 13:10	08/14/24 14:20
880-47252-14	TT-3 (1')	Solid	08/13/24 13:11	08/14/24 14:20
880-47252-15	TT-3 (2')	Solid	08/13/24 13:15	08/14/24 14:20
880-47252-16	TT-3 (3')	Solid	08/13/24 13:18	08/14/24 14:20
880-47252-17	TT-3 (4')	Solid	08/13/24 13:22	08/14/24 14:20
880-47252-18	TT-4 (0-0.5')	Solid	08/12/24 12:20	08/14/24 14:20
880-47252-19	TT-4 (1')	Solid	08/12/24 12:22	08/14/24 14:20
880-47252-20	TT-4 (2')	Solid	08/12/24 12:25	08/14/24 14:20
880-47252-21	TT-4 (4')	Solid	08/12/24 14:21	08/14/24 14:20
880-47252-25	TT-2 (2')	Solid	08/13/24 00:00	08/14/24 14:20
880-47259-21	TT-4 (3')	Solid	08/12/24 12:27	08/14/24 14:20

## Analysis Request of Chain of Custody Record



## Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

880-47252 Chain of Custody

of 3

Client Name: Chevron		Site Manager: John Faught		ANALYSIS REQUEST (Circle or Specify Method No.)	
Project Name: Cicada Unit 022H Delineation Assessment		Release 1			
Project Location: (county, state) Eddy County, TX		Project #: 212C-MD-03521			
Invoice to: john.faught1@tetrtech.com; OGA.ECS.AccountsPayable@tetrtech.com		Req # 575506			
Receiving Laboratory: Eurofins Laboratories		Sampler Signature: M. Castrejon			
Comments: Email: john.faught1@tetrtech.com; clair.gonzales@tetrtech.com					
LAB #  ( LAB USE ONLY )	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD
		YEAR: 2024	DATE	TIME	WATER
		X		X	
	H-5 (0-1')	8/13	1150	X	X
	H-6 (0-1')	8/12	1110	X	X
	H-7 (0-1')	8/12	1132	X	X
	TY-1 (0-0.5')	8/13	1215	X	X
	TT-1 (1')	8/13	1217	X	X
	TT-1 (2')	8/13	1219	X	X
	TT-1 (3')	8/13	1222	X	X
	TT-1 (4')	8/13	1225	X	X
	TT-1 (0-0.5')	8/13	1241	X	X
	TT-2 (1')	8/13	1243	X	X
LAB USE ONLY	REMARKS:				
Relinquished by: <i>Matthew Faught</i> Date: 8/14/24 Time:		Received by: <i>[Signature]</i> Date: 8/14/24 Time: 1420		RUSH: Same Day 24 hr 48 hr 72 hr	
Relinquished by: Date: Time:		Received by: Date: Time:		Rush Charges Authorized	
Relinquished by: Date: Time:		Received by: Date: Time:		Special Report Limits or TRRP Report	
Sample Temperature: 23.1 - 24					
(Circle) HAND DELIVERED FEDEX UPS Tracking #: _____					

ORIGINAL COPY

## Analysis Request of Chain of Custody Record

Page 2 of 3

## Tetra Tech, Inc.

901 W Wall Street, Ste 100  
Midland, Texas 79701  
Tel (432) 682-4559  
Fax (432) 682-3946

47259

Client Name: Chevron		Site Manager: John Faught		ANALYSIS REQUEST (Circle or Specify Method No.)																								
Project Name: Cicada Unit 022H Delineation Assessment		Release 1																										
Project Location: (county, state) Eddy County, TX		Project #: 212C-MD-03521																										
Invoice to: john.faught1@tetrtech.com; OGA.ECS.AccountsPayable@tetrtech.com		Req # 575506																										
Receiving Laboratory: Eurofins Laboratories		Sampler Signature: M. Castrejon																										
Comments: Email: john.faught1@tetrtech.com; clair.gonzales@tetrtech.com																												
LAB #  ( LAB USE ONLY )	SAMPLE IDENTIFICATION	SAMPLING		MATRIX	PRESERVATIVE METHOD		# CONTAINERS	FILTERED (Y/N)	BTEX 8021B		BTEX 8260B		PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg	TCPLP Metals Ag As Ba Cd Cr Pb Se Hg	TCPLP Volatiles	TCPLP Semi Volatiles	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi. Vol. 8270C/625	PCBs 8082 / 608	NORM	PLM (Asbestos)	X Chloride 300.0	Chloride Sulfate TDS	General Water Chemistry (see attached list)	Anion/Cation Balance	Hold
		YEAR: 2024	DATE	TIME	WATER	SOIL			HCL	HNO <sub>3</sub>	ICE	BTEX 8021B																
TT-2 (3')	8/13	12417	X		X			X																				
TT-2 (4')	8/13	1253																										
TT-3 (0-0.5')	8/13	1310																										
TT-3 (1')	8/13	1311																										
TT-3 (2')	8/13	1315																										
TT-3 (3')	8/13	1318																										
TT-3 (4')	8/13	1322																										
TT-4 (0-0.5')	8/12	1220																										
TT-4-(1')	8/12	1222																										
TT-4-(2')	8/12	1225	↓			↓			↓																↓			
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	LAB USE ONLY		REMARKS:																				
<i>Matthew G</i>	8/14/24		<i>JAD</i>	8/16/24	1420																							
Relinquished by:	Date:	Time:	Received by:	Date:	Time:																							
Relinquished by:	Date:	Time:	Received by:	Date:	Time:	Sample Temperature		<input type="checkbox"/> RUSH: Same Day 24 hr 48 hr 72 hr <input type="checkbox"/> Rush Charges Authorized <input type="checkbox"/> Special Report Limits or TRRP Report																				
(Circle) HAND DELIVERED FEDEX UPS Tracking #:																												

ORIGINAL COPY



## Login Sample Receipt Checklist

Client: Tetra Tech Inc

Job Number: 880-47252-1  
SDG Number: Eddy County,**Login Number: 47252****List Source: Eurofins Midland****List Number: 1****Creator: Vasquez, Julisa**

Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		1
Sample custody seals, if present, are intact.	N/A		2
The cooler or samples do not appear to have been compromised or tampered with.	True		3
Samples were received on ice.	True		4
Cooler Temperature is acceptable.	True		5
Cooler Temperature is recorded.	True		6
COC is present	True		7
COC is filled out in ink and legible.	True		8
COC is filled out with all pertinent information	True		9
Is the Field Sampler's name present on COC?	True		10
There are no discrepancies between the containers received and the COC.	True		11
Samples are received within Holding Time (excluding tests with immediate HTs)	True		12
Sample containers have legible labels.	True		13
Containers are not broken or leaking.	True		14
Sample collection date/times are provided.	True		
Appropriate sample containers are used.	True		
Sample bottles are completely filled.	True		
Sample Preservation Verified.	N/A		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True		
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A		

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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

QUESTIONS

Action 393381

**QUESTIONS**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 393381
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2414869489
Incident Name	NAPP2414869489 CICADA UNIT #022H @ 30-015-45423
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received
Incident Well	[30-015-45423] CICADA UNIT #022H

**Location of Release Source***Please answer all the questions in this group.*

Site Name	CICADA UNIT #022H
Date Release Discovered	05/27/2024
Surface Owner	Federal

**Incident Details***Please answer all the questions in this group.*

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

**Nature and Volume of Release***Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.*

Crude Oil Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Crude Oil   Released: 12 BBL   Recovered: 1 BBL   Lost: 11 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 59 BBL   Recovered: 4 BBL   Lost: 55 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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QUESTIONS, Page 2

Action 393381

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 393381
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

*With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<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: Kennedy Lincoln Title: Environmental Specialist Email: kennedy.lincoln@chevron.com Date: 05/30/2024
--	--

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QUESTIONS, Page 3

Action 393381

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:  4323
	Action Number:  393381
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 51 and 75 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
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	Greater than 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (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	High
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
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	1420
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	511
GRO+DRO (EPA SW-846 Method 8015M)	510
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	12/02/2024
On what date will (or did) the final sampling or liner inspection occur	12/13/2024
On what date will (or was) the remediation complete(d)	12/20/2024
What is the estimated surface area (in square feet) that will be reclaimed	3510
What is the estimated volume (in cubic yards) that will be reclaimed	155
What is the estimated surface area (in square feet) that will be remediated	3510
What is the estimated volume (in cubic yards) that will be remediated	155

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 4

Action 393381

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 393381
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Remediation Plan (continued)**

*Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.*

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <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	<i>Not answered.</i>
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	<i>Not answered.</i>
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Yes
In which state is the disposal taking place	Texas
What is the name of the out-of-state facility	Red Bluff Facility
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	<i>Not answered.</i>
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	<i>Not answered.</i>

*Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.*

I 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: Kennedy Lincoln Title: Environmental Specialist Email: kennedy.lincoln@chevron.com Date: 10/17/2024
--	--

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 5

Action 393381

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:  4323
	Action Number:  393381
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Deferral Requests Only***Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.*

Requesting a deferral of the remediation closure due date with the approval of this submission	No
--	----

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QUESTIONS, Page 6

Action 393381

**QUESTIONS (continued)**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID:  4323
	Action Number:  393381
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	{Unavailable.}

<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	No

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CONDITIONS

Action 393381

**CONDITIONS**

Operator:  CHEVRON U S A INC 6301 Deauville Blvd Midland, TX 79706	OGRID: 4323
	Action Number: 393381
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
nvelez	The remediation plan is approved as written. Responsible party has 90-days (January 30, 2025) to submit to OCD its appropriate or final remediation closure report.	11/1/2024