

October 13, 2025

New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Closure Request PLU 201 Flowline

Incident Number nAPP2520446632

**Eddy County, New Mexico** 

#### To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document site assessment, excavation, and soil sampling activities at the PLU 201 Flowline (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water and crude oil onto Gavilan Road. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this *Closure Request*, describing site assessment and excavation activities that have occurred and requesting no further action for Incident Number nAPP2520446632.

### SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit K, Section 07, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.23004°, -103.91117°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On July 21, 2025, corrosion to a production flowline resulted in the release of approximately 2 barrels (bbls) of crude oil and 4 bbls of produced water onto Gavilan Road. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; 1 bbl of crude oil and 1 bbl of released produced water were recovered. XTO reported the release to the NMOCD via Notification of Release (NOR) and an Initial C-141 Application (C-141) on July 23, 2025. The release was assigned Incident Number nAPP2520446632.

#### SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented below, and potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is a livestock watering well (C-02108) located approximately 375 feet east of the Site. On December 31, 1963, the depth to groundwater was measured in the well at a depth of 186 feet bgs.

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Highway | Carlsbad, NM 88220 | ensolum.com

XTO Energy, Inc Closure Request PLU 201 Flowline



The well was completed to a total depth of 200 feet bgs. The second closest permitted groundwater well with recorded depth to groundwater data is United States Geological Survey (USGS) well 321339103541801, located approximately 0.6 miles southeast of the Site. On November 4, 1992, the groundwater well reported depth to groundwater at 179 feet bgs and a total depth of 192 feet bgs. The Well Records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 1,175 feet east of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. As discussed above, the Site is roughly 375 feet west of a livestock watering well (C-02108). The Site is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

#### SITE ASSESSMENT ACTIVITIES

On July 23, 2025, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the C-141 and visual observations. No samples were collected during this Site visit. The release extent was mapped utilizing a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. Photographic documentation is included in Appendix B.

#### **EXCAVATION AND SOIL SAMPLING ACTIVITIES**

Between July 31 and August 11, 2025, Ensolum personnel were at the Site to oversee excavation activities. Impacted soil was excavated from the release area as indicated by visible staining and field screening activities. Excavation activities were performed using heavy equipment. To direct excavation activities, Ensolum personnel field screened the soil samples for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Following removal of impacted soil, Ensolum personnel collected five composite soil samples (FS01 through FS04, and SW01) representing no more than 200 square feet from the floor and sidewalls of the excavation. The 5-point composite soil samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Confirmation soil samples FS01 through FS04 were collected from the floor of the excavation at a depth of 1 foot bgs. Confirmation sidewall soil sample SW01 was collected from the sidewalls of the excavation at depths ranging from ground surface to 1 foot bgs. In addition, one composite soil sample was collected of the backfill material (BF-Caliche) prior to use at the Site. The excavation extent and confirmation soil sample locations are presented on Figure 3. Photographic documentation of the excavation activities is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples collected on July

XTO Energy, Inc Closure Request PLU 201 Flowline



31 and August 1, 2025 were transported under strict chain-of-custody procedures to Eurofins Carlsbad Laboratories (Eurofins) in Carlsbad, New Mexico. The soil sample collected on August 11, 2025 was transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico. All samples were submitted for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH- diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300 or Standards Method SM4500.

The final excavation extent measured approximately 670 square feet. A total of approximately 15 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Landfill in Hobbs, New Mexico. The excavation was backfilled on August 11, 2025 with material purchased locally and recontoured to match pre-existing road conditions. Photographic documentation of excavation and backfill activities is included in Appendix B.

#### LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the confirmation floor soil samples FS01 through FS04 and sidewall soil sample SW01, collected at depths ranging from ground surface to 1-foot bgs, indicated that all COC concentrations were compliant with the Closure Criteria as well as the reclamation requirement. The confirmation samples confirmed the lateral and vertical extents of the release. Laboratory analytical results are summarized in Table 1, and the complete laboratory analytical reports are included as Appendix C.

### **CLOSURE REQUEST**

Site assessment and excavation activities were conducted at the Site to address the July 21, 2025, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement. Based on the soil sample analytical results, no further remediation was required. XTO backfilled the excavation with material purchased locally and recontoured the Site to match pre-existing site conditions. Since the release and excavation areas were located within Gavilan Road, no reclamation or revegetation was required at this time. Steps will be taken for reclamation and re-vegetation purposes once the lease road is decommissioned in the future.

Excavation of impacted soil has mitigated potential impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number nAPP2520446632.

If you have any questions or comments, please contact Ms. Tacoma Morrissey at (337) 257-8307 or tmorrissey@ensolum.com.

Sincerely, **Ensolum, LLC** 

Latt Lol-

Katherine Kahn, P.G.

Tacoma Morrissey

Mouissey

XTO Energy, Inc Closure Request PLU 201 Flowline



### Senior Managing Geologist

### Associate Principal

cc: Dale Woodall, XTO

Richard Kotzur, XTO

**Bureau of Land Management** 

### Appendices:

Figure 1 Site Receptor Map

Figure 2 Site Map

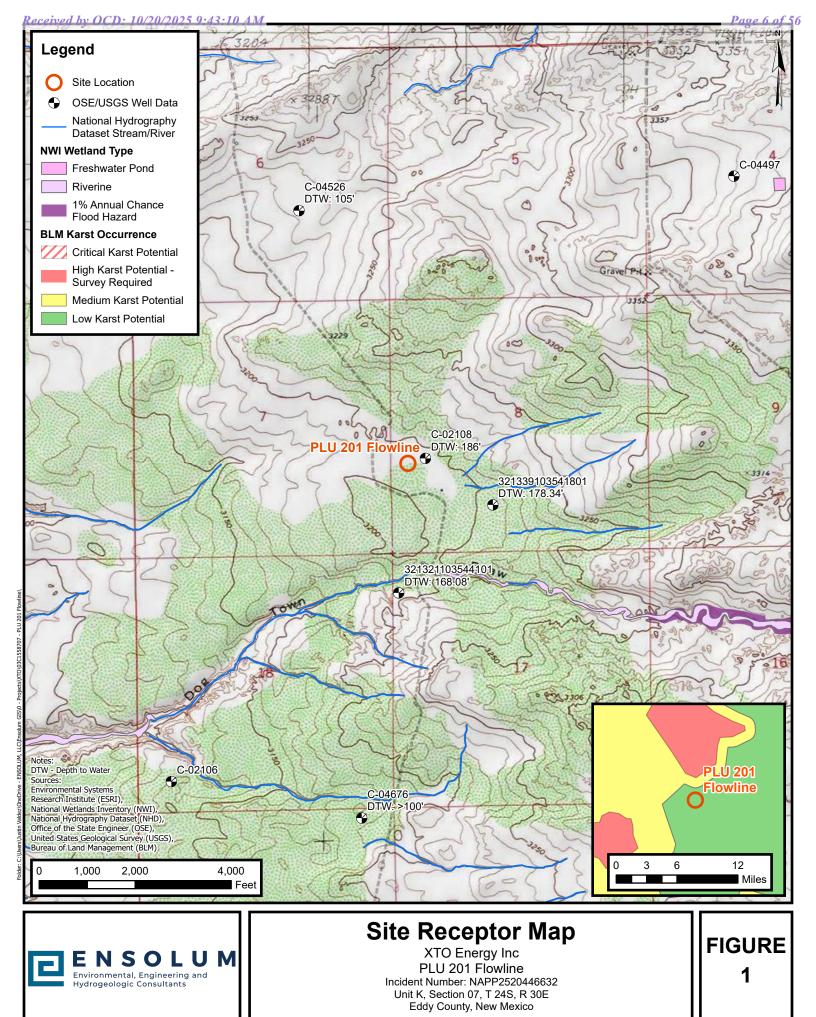
Figure 3 Confirmation Soil Sample Locations
Table 1 Soil Sample Analytical Results
Appendix A Referenced Well Records

Appendix B Photographic Log

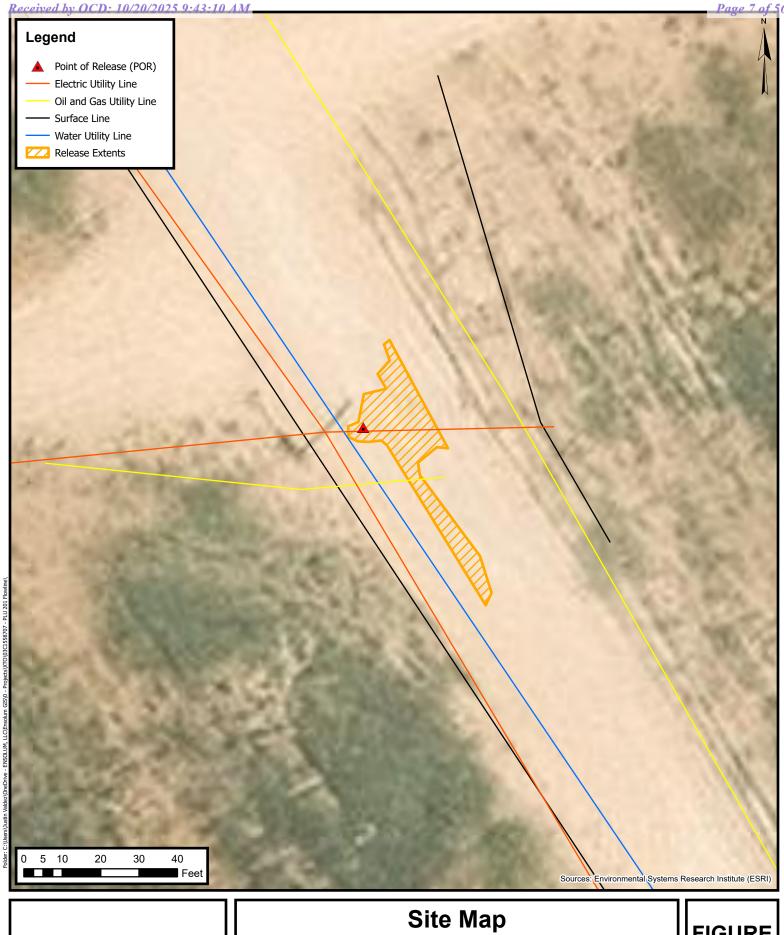
Appendix C Laboratory Analytical Reports & Chain-of-Custody Documentation



**FIGURES** 



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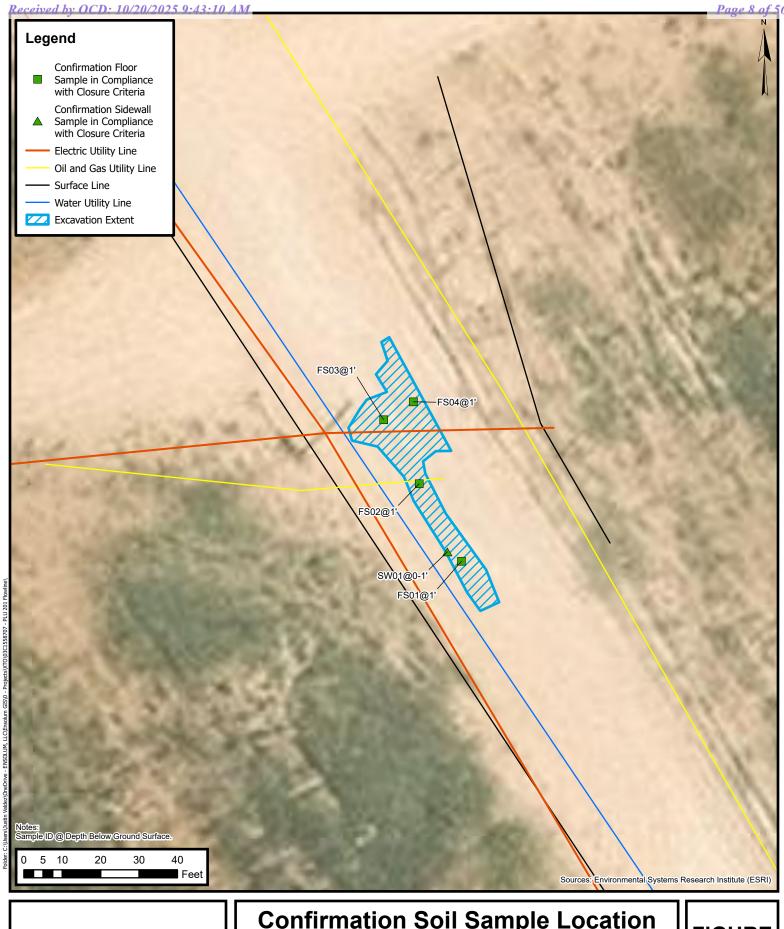




XTO Energy Inc
PLU 201 Flowline
Incident Number: NAPP2520446632
Unit K, Section 07, T 24S, R 30E
Eddy County, New Mexico

FIGURE 2

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# **Confirmation Soil Sample Location**

XTO Energy Inc PLU 201 Flowline Incident Number: NAPP2520446632 Unit K, Section 07, T 24S, R 30E Eddy County, New Mexico

**FIGURE** 3

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**TABLE** 



# TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS PLU 201 Flowline - Spill XTO Energy, Inc Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)			
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600			
	Excavation Soil Samples												
FS01	07/31/2025	1	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	183			
FS02	08/01/2025	1	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	263			
FS03	08/01/2025	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	434			
FS04	08/11/2025	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	288			
SW01	08/01/2025	0-1	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	404			
				В	ackfill Soil Sam	ple							
BF - Caliche	07/31/2025	0-1	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	207			

#### Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation

requirement where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities

Ensolum 1 of 1



# **APPENDIX A**

Referenced Well Records

# **Point of Diversion Summary**

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

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Υ	Мар
	C 02108		NW	SW	08	24S	30E	602702.0	3566487.0 *	

\* UTM location was derived from PLSS - see Help

Driller License: Driller Company:

Driller Name: UNKNOWN

**Drill Start Date: Drill Finish Date:** 1963-12-31 **Plug Date:** 

Log File Date: PCW Rcv Date: Source:

Pump Type: Pipe Discharge Size: Estimated Yield: 16

Casing Size: 7.00 Depth Well: 200 Depth Water: 186

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, or suitability for any particular purpose of the data.

9/12/25 1:39 PM MST Point of Diversion Summary

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**USGS Home Contact USGS** Search USGS

**National Water Information System: Web Interface** 

**USGS** Water Resources

Groundwater ✔ United States **∨** GO

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#### Click to hideNews Bulletins

• Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access real-time water data from over 13,500 stations nationwide.

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

#### Search Results -- 1 sites found

Agency code = usgs site\_no list =

• 321339103541801

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

#### USGS 321339103541801 24S.30E.08.33222

Eddy County, New Mexico

Table of data

Latitude 32°13'39", Longitude 103°54'18" NAD27

Land-surface elevation 3,207 feet above NAVD88

The depth of the well is 192 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Rustler Formation (312RSLR) local aquifer.

#### **Output formats**

<u>ab-separate</u>	<u>d data</u>									
Graph of data	<u>a</u>									
Reselect perio	<u>od</u>									
Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measur
1959-03-23		D	62610		3029.31	NGVD29	1	Z		
1959-03-23		D	62611		3030.98	NAVD88	1	Z		
1959-03-23		D	72019	176.02			1	Z		
1976-12-01		D	62610		3026.78	NGVD29	1	Z		
1976-12-01		D	62611		3028.45	NAVD88	1	Z		
1976-12-01		D	72019	178.55			1	Z		
1983-02-01		D	62610		3026.70	NGVD29	1	Z		
1983-02-01		D	62611		3028.37	NAVD88	1	Z		
1983-02-01		D	72019	178.63			1	Z		
1987-10-15		D	62610		3026.98	NGVD29	Р	S		
1987-10-15		D	62611		3028.65	NAVD88	Р	S		
1987-10-15		D	72019	178.35			Р	S		
1992-11-04		D	62610		3026.99	NGVD29	Р	S		
1992-11-04		D	62611		3028.66	NAVD88	Р	S		

D

72019

178.34

1992-11-04

#### Explanation

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

**Questions or Comments** <u>Help</u> Data Tips Explanation of terms Subscribe for system changes

FOIA Policies and Notices Accessibility Privacy

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

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2025-09-12 15:47:11 EDT

0.36 0.3 nadww02





**APPENDIX B** 

Photographic Log



### **Photographic Log**

XTO Energy Inc. PLU 201 Flowline nAPP2520446632





Photograph: 1 Date: 7/23/2025

Description: Stained Area and Point of Release

View: Northwest

Photograph: 2 Date: 8/1/2025

Description: Excavation Activity

View: West





Photograph: 3 Date: 8/11/2025

Description: Excavation activities

View: Southeast

Photograph: 4 Date: 8/11/2025

Description: Backfilling activities

View: West



# **APPENDIX C**

Laboratory Analytical Reports & Chain-of-Custody Documentation

**Environment Testing** 

# **ANALYTICAL REPORT**

### PREPARED FOR

Attn: Ashley Holmes Ensolum 601 N. Marienfeld St. Suite 400 Midland, Texas 79701

Generated 8/7/2025 10:30:42 AM

### **JOB DESCRIPTION**

PLU 201 FLOWLINE 03C1558707

### **JOB NUMBER**

890-8560-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220

### **Eurofins Carlsbad**

### **Job Notes**

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

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

### **Authorization**

Generated 8/7/2025 10:30:42 AM

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

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Client: Ensolum
Project/Site: PLU 201 FLOWLINE
Laboratory Job ID: 890-8560-1
SDG: 03C1558707

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### **Definitions/Glossary**

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE

SDG: 03C1558707

**Qualifiers** 

**GC VOA** Qualifier **Qualifier Description** 

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

**GC Semi VOA** 

Qualifier **Qualifier Description** 

U Indicates the analyte was analyzed for but not detected.

**HPLC/IC** 

Qualifier **Qualifier Description** 

Indicates the analyte was analyzed for but not detected.

**Glossary** 

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

74 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** 

Detection Limit (DoD/DOE) DL

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) Most Probable Number MPN MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

NFG 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)

Relative Percent Difference, a measure of the relative difference between two points RPD

TEF Toxicity Equivalent Factor (Dioxin) TEQ Toxicity Equivalent Quotient (Dioxin)

**TNTC** Too Numerous To Count

### **Case Narrative**

Client: Ensolum Job ID: 890-8560-1

Project: PLU 201 FLOWLINE

Job ID: 890-8560-1 Eurofins Carlsbad

### Job Narrative 890-8560-1

The analytical test results presented in this report meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page, unless otherwise noted. Data qualifiers and/or narrative comments are included to explain any exceptions, if applicable. Regulated compliance samples (e.g. SDWA, NPDES) must comply with associated agency requirements/permits.

- Matrix-specific batch QC (e.g., MS, MSD, SD) may not be reported when insufficient sample volume is available or when site-specific QC samples are not submitted. In such cases, a Laboratory Control Sample Duplicate (LCSD) may be analyzed to provide precision data for the batch.
- For samples analyzed using surrogate and/or isotope dilution analytes, any recoveries falling outside of established acceptance criteria are re-prepared and/or re-analyzed to confirm results, unless the deviation is due to sample dilution or otherwise explained in the case narrative.

#### Receipt

The samples were received on 8/1/2025 3:53 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 6.0°C.

#### **GC VOA**

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-115648 and analytical batch 880-115668 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

### **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 Carlsbad** 

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Matrix: Solid

### **Client Sample Results**

Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Client Sample ID: FS 02 Lab Sample ID: 890-8560-1

Date Collected: 08/01/25 11:20 Date Received: 08/01/25 15:53

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		08/03/25 16:00	08/03/25 21:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			08/03/25 16:00	08/03/25 21:02	1
1,4-Difluorobenzene (Surr)	102		70 - 130			08/03/25 16:00	08/03/25 21:02	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			08/03/25 21:02	1
Mathadi CM04C 004E NM Diag	al Banna Orman	:aa (DDO) (	00)					
Method: SW846 8015 NM - Diese Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte		Qualifici		Onit		ricparca	Allalyzca	
Total TPH	<49.8	U	49.8	ma/Ka			08/05/25 20:17	1
Total TPH	<49.8	U	49.8	mg/Kg			08/05/25 20:17	1
- -				mg/Kg			08/05/25 20:17	1
: Method: SW846 8015B NM - Die	sel Range Orga			mg/Kg Unit		Prepared	08/05/25 20:17  Analyzed	1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	sel Range Orga	nics (DRO) Qualifier	(GC)		<u>D</u>	Prepared 07/31/25 14:16		1
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result	nics (DRO) Qualifier	(GC)	Unit	<u>D</u>	<u>.</u>	Analyzed	Dil Fac
Total TPH  Method: SW846 8015B NM - Die Analyte  Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)	sel Range Orga Result <49.8	nics (DRO) Qualifier U	(GC)  RL  49.8	<mark>Unit</mark> mg/Kg	<u>D</u>	07/31/25 14:16	<b>Analyzed</b> 08/05/25 20:17	Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)	sel Range Orga Result <49.8 <49.8	nics (DRO) Qualifier U	(GC)  RL  49.8  49.8  49.8	unit mg/Kg mg/Kg	<u>D</u>	07/31/25 14:16 07/31/25 14:16 07/31/25 14:16	Analyzed 08/05/25 20:17 08/05/25 20:17 08/05/25 20:17	1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)  Surrogate	sel Range Orga Result <49.8 <49.8 <49.8 <49.8 %Recovery	nics (DRO) Qualifier U	(GC)  RL 49.8  49.8  49.8  Limits	unit mg/Kg mg/Kg	<u>D</u>	07/31/25 14:16 07/31/25 14:16 07/31/25 14:16 <b>Prepared</b>	Analyzed 08/05/25 20:17 08/05/25 20:17 08/05/25 20:17 Analyzed	Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <49.8 <49.8	nics (DRO) Qualifier U	(GC)  RL  49.8  49.8  49.8	unit mg/Kg mg/Kg	<u>D</u>	07/31/25 14:16 07/31/25 14:16 07/31/25 14:16	Analyzed 08/05/25 20:17 08/05/25 20:17 08/05/25 20:17	Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane o-Terphenyl	sel Range Orga           Result         <49.8	U  Qualifier  U  Qualifier	(GC)  RL 49.8  49.8  49.8  Limits 70 - 130 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	07/31/25 14:16 07/31/25 14:16 07/31/25 14:16 <b>Prepared</b> 07/31/25 14:16	Analyzed 08/05/25 20:17 08/05/25 20:17 08/05/25 20:17  Analyzed 08/05/25 20:17	1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)  Surrogate 1-Chlorooctane	sel Range Orga Result <49.8 <49.8 <49.8  %Recovery 99 102  1 Chromatograp	U  Qualifier  U  Qualifier	(GC)  RL 49.8  49.8  49.8  Limits 70 - 130 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	07/31/25 14:16 07/31/25 14:16 07/31/25 14:16 <b>Prepared</b> 07/31/25 14:16	Analyzed 08/05/25 20:17 08/05/25 20:17 08/05/25 20:17  Analyzed 08/05/25 20:17	Dil Fac

Client Sample ID: FS 03 Lab Sample ID: 890-8560-2

Date Collected: 08/01/25 11:47

Date Received: 08/01/25 15:53

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		08/03/25 16:00	08/03/25 21:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			08/03/25 16:00	08/03/25 21:22	

**Eurofins Carlsbad** 

**Matrix: Solid** 

Job ID: 890-8560-1

Client: Ensolum SDG: 03C1558707 Project/Site: PLU 201 FLOWLINE

**Client Sample ID: FS 03** Lab Sample ID: 890-8560-2

Date Collected: 08/01/25 11:47 Matrix: Solid Date Received: 08/01/25 15:53

Sample Depth: 1

Method: SW846 8021B - Volatile	Organic Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	98	70 - 130	08/03/25 16:00	08/03/25 21:22	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398 U	0.00398	ma/Ka			08/03/25 21:22	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg		<del> </del>	08/05/25 20:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:32	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:32	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101	70 - 130	07/31/25 14:16	08/05/25 20:32	1
o-Terphenyl	105	70 - 130	07/31/25 14:16	08/05/25 20:32	1

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

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	434		10.1	mg/Kg			08/04/25 13:35	1

Client Sample ID: SW 01 Lab Sample ID: 890-8560-3

Date Collected: 08/01/25 12:01 Date Received: 08/01/25 15:53

Sample Depth: 0-1

Method:	· SW846 8021	B - Volatile	Organic Co	mpounds (GC)

Welliou. Syvo40 002 ID - Volatile (	Jigariic Comp	ounus (GC)	)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/03/25 16:00	08/03/25 21:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			08/03/25 16:00	08/03/25 21:43	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	08/03/25 16:00	08/03/25 21:43	1
1 4-Difluorobenzene (Surr)	107		70 - 130	08/03/25 16:00	08/03/25 21:43	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			08/03/25 21:43	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			08/05/25 20:47	1

**Eurofins Carlsbad** 

**Matrix: Solid** 

Job ID: 890-8560-1

Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Client Sample ID: SW 01 Lab Sample ID: 890-8560-3

Date Collected: 08/01/25 12:01 Matrix: Solid Date Received: 08/01/25 15:53

Sample Depth: 0-1

Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:47	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:47	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/31/25 14:16	08/05/25 20:47	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	97		70 - 130			07/31/25 14:16	08/05/25 20:47	
o-Terphenyl	100		70 - 130			07/31/25 14:16	08/05/25 20:47	
Method: EPA 300.0 - Anions, Ion	Chromatograp	hy - Solubl	e					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	404		9.90	mg/Kg			08/04/25 13:43	-

Client Sample ID: FS 01 Lab Sample ID: 890-8560-4 Date Collected: 07/31/25 14:37 Matrix: Solid

Date Received: 08/01/25 15:53

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
Toluene	<0.00198	U	0.00198	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		08/03/25 16:00	08/03/25 22:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			08/03/25 16:00	08/03/25 22:03	1
1,4-Difluorobenzene (Surr)	101		70 - 130			08/03/25 16:00	08/03/25 22:03	1
Method: TAL SOP Total BTEX - 1	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00397	U	0.00397	mg/Kg			08/03/25 22:03	1
				mg/Kg			08/03/25 22:03	1
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)					·
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (	GC)	Unit	D	Prepared	Analyzed	Dil Fac
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (	GC)		D	Prepared		·
Method: SW846 8015 NM - Diese Analyte	Range Organ Result <50.0	ics (DRO) ( Qualifier	RL 50.0	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <50.0 sel Range Organ	ics (DRO) ( Qualifier	RL 50.0	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <50.0 sel Range Organ	Qualifier Unics (DRO) Qualifier	RL 50.0	Unit mg/Kg		<u> </u>	Analyzed 08/06/25 21:32	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Range Organ Result <50.0 sel Range Organ Result	Qualifier U nics (DRO) Qualifier U u U U U U U U U U U U U U U U U U U	GC)  RL  50.0  (GC)  RL	Unit mg/Kg		Prepared	Analyzed 08/06/25 21:32 Analyzed	Dil Fac Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	el Range Organ Result <50.0 sel Range Orga Result <50.0	Qualifier U nics (DRO) Qualifier U u U U U U U U U U U U U U U U U U U	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 08/04/25 09:55	Analyzed 08/06/25 21:32  Analyzed 08/06/25 21:32	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <50.0 sel Range Orga Result <50.0	cics (DRO) (Control of the property of the pro	GC)  RL  50.0  (GC)  RL  50.0	Unit mg/Kg  Unit mg/Kg		Prepared 08/04/25 09:55	Analyzed 08/06/25 21:32  Analyzed 08/06/25 21:32	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0	cics (DRO) (Control of the property of the pro	GC)  RL  50.0  (GC)  RL  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/04/25 09:55 08/04/25 09:55	Analyzed 08/06/25 21:32  Analyzed 08/06/25 21:32 08/06/25 21:32	Dil Fac  Dil Fac  1  1  1
Method: SW846 8015 NM - Diese Analyte Total TPH  Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oil Range Organics (Over C28-C36)	sel Range Organ Result <50.0 sel Range Orga Result <50.0 <50.0 <50.0	cics (DRO) (Control of the property of the pro	GC) RL 50.0  (GC) RL 50.0  50.0  50.0	Unit mg/Kg  Unit mg/Kg  mg/Kg		Prepared 08/04/25 09:55 08/04/25 09:55 08/04/25 09:55	Analyzed 08/06/25 21:32  Analyzed 08/06/25 21:32 08/06/25 21:32	Dil Fac  Dil Fac  1

Client: Ensolum Job ID: 890-8560-1
Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Client Sample ID: FS 01 Lab Sample ID: 890-8560-4

Date Collected: 07/31/25 14:37

Date Received: 08/01/25 15:53

Matrix: Solid

Sample Depth: 1

o-Terphenyl

Method: EPA 300.0 - Anions, Ion Cl	hromatography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183	10.1	mg/Kg			08/04/25 13:50	1

Client Sample ID: BF - CALICHE

Date Collected: 07/31/25 12:01

Lab Sample ID: 890-8560-5

Matrix: Solid

Date Collected: 07/31/25 12:01 Date Received: 08/01/25 15:53

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/03/25 16:00	08/03/25 23:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			08/03/25 16:00	08/03/25 23:37	1
1,4-Difluorobenzene (Surr)	90		70 - 130			08/03/25 16:00	08/03/25 23:37	1
Method: TAL SOP Total BTEX	- Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	П	0.00402	mg/Kg			08/03/25 23:37	

Method: SW846 8015 NM - Diesel F	Range Organi	ics (DRO) (G	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			08/06/25 22:04	1
Method: SW846 8015B NM - Diese	Range Orga	nics (DRO) (	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Gasoline Range Organics	<49.8	U	49.8	mg/Kg	08/04/25 09:55	08/06/25 22:04	1
(GRO)-C6-C10							
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg	08/04/25 09:55	08/06/25 22:04	1
C10-C28) Oil Range Organics (Over C28-C36)	<49.8	П	49.8	mg/Kg	08/04/25 09:55	08/06/25 22:04	1
Oil Hange Organics (Over 020-000)	140.0	O	40.0	mg/Ng	00/04/20 00:00	00/00/20 22:04	
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130		08/04/25 09:55	08/06/25 22:04	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	207		10.0	mg/Kg			08/04/25 13:58	1	

70 - 130

96

**Eurofins Carlsbad** 

08/04/25 09:55

08/06/25 22:04

### **Surrogate Summary**

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-8554-A-1-A MS	Matrix Spike	104	104	
890-8554-A-1-B MSD	Matrix Spike Duplicate	96	101	
890-8560-1	FS 02	89	102	
890-8560-2	FS 03	96	98	
890-8560-3	SW 01	101	107	
890-8560-4	FS 01	98	101	
890-8560-5	BF - CALICHE	108	90	
LCS 880-115648/1-A	Lab Control Sample	99	104	
LCSD 880-115648/2-A	Lab Control Sample Dup	101	107	
MB 880-115648/5-A	Method Blank	98	92	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-8555-A-7-E MS	Matrix Spike	111	111	
890-8555-A-7-F MSD	Matrix Spike Duplicate	112	110	
390-8557-A-14-D MS	Matrix Spike	101	96	
890-8557-A-14-E MSD	Matrix Spike Duplicate	101	96	
390-8560-1	FS 02	99	102	
390-8560-2	FS 03	101	105	
390-8560-3	SW 01	97	100	
390-8560-4	FS 01	109	92	
390-8560-5	BF - CALICHE	113	96	
_CS 880-115529/2-A	Lab Control Sample	104	105	
CS 880-115735/2-A	Lab Control Sample	98	100	
CSD 880-115529/3-A	Lab Control Sample Dup	105	103	
CSD 880-115735/3-A	Lab Control Sample Dup	115	118	
/IB 880-115529/1-A	Method Blank	86	94	
MB 880-115735/1-A	Method Blank	96	91	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-115648/5-A

**Matrix: Solid** 

Analysis Batch: 115668

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 115648** 

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		08/02/25 19:07	08/03/25 18:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		08/02/25 19:07	08/03/25 18:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		08/02/25 19:07	08/03/25 18:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		08/02/25 19:07	08/03/25 18:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		08/02/25 19:07	08/03/25 18:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		08/02/25 19:07	08/03/25 18:37	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	08/02/25 19:07	08/03/25 18:37	1
1,4-Difluorobenzene (Surr)	92		70 - 130	08/02/25 19:07	08/03/25 18:37	1

Lab Sample ID: LCS 880-115648/1-A

**Matrix: Solid** 

**Analysis Batch: 115668** 

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

Prep Batch: 115648

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08040 mg/Kg 80 70 - 130 Toluene 0.100 0.07898 mg/Kg 79 70 - 130 Ethylbenzene 0.100 0.08634 mg/Kg 86 70 - 130 70 - 130 0.200 86 m-Xylene & p-Xylene 0.1721 mg/Kg

0.08862

mg/Kg

0.100

LCS LCS

Surrogate	%Recovery Qualif	ier Limits
4-Bromofluorobenzene (Surr)	99	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: LCSD 880-115648/2-A

**Matrix: Solid** 

o-Xylene

Analysis Batch: 115668

Client Sample ID: Lab Control Sample Dup

70 - 130

Prep Type: Total/NA

**Prep Batch: 115648** 

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.08861 mg/Kg 89 70 - 130 10 35 Toluene 0.100 0.08483 mg/Kg 85 70 - 130 35 Ethylbenzene 0.100 0.09343 mg/Kg 93 70 - 130 8 35 m-Xylene & p-Xylene 0.200 0.1834 mg/Kg 92 70 - 130 35 0.100 0.09247 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	101		70 - 130
1.4-Difluorobenzene (Surr)	107		70 <sub>-</sub> 130

Lab Sample ID: 890-8554-A-1-A MS

**Matrix: Solid** 

Analysis Batch: 115668

Client Sample ID: Matrix Spike Prep Type: Total/NA

Prep Batch: 115648

Sample Sample Spike MS MS %Rec Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits <0.00202 U F1 0.100 0.06162 F1 62 70 - 130 Benzene mg/Kg Toluene <0.00202 UF1 0.100 0.06122 F1 mg/Kg 61 70 - 130

### QC Sample Results

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

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

Lab Sample ID: 890-8554-A-1-A MS

**Matrix: Solid** 

Analysis Batch: 115668

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00202	U	0.100	0.07279		mg/Kg		73	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.200	0.1436		mg/Kg		72	70 - 130
o-Xylene	< 0.00202	U	0.100	0.07172		mg/Kg		72	70 - 130

MS MS

Surrogate	%Recovery Qu	alifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-8554-A-1-B MSD

**Matrix: Solid** 

Analysis Batch: 115668

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Matrix Spike

Prep Type: Total/NA

**Prep Batch: 115648** 

Prep Type: Total/NA

Prep Batch: 115648

Sample Sample Spike MSD MSD %Rec Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits 0.100 Benzene <0.00202 UF1 0.07331 mg/Kg 73 70 - 130 17 35 Toluene <0.00202 UF1 0.100 0.06623 F1 mg/Kg 66 70 - 130 8 35 Ethylbenzene <0.00202 U 0.100 0.07103 71 70 - 130 2 35 mg/Kg <0.00403 U 0.200 0.1400 70 70 - 130 35 m-Xylene & p-Xylene mg/Kg 3 0.100 <0.00202 U 0.07080 71 70 - 130 o-Xylene mg/Kg

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-115529/1-A

**Matrix: Solid** 

Analysis Batch: 115840

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 115529** 

Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte Gasoline Range Organics 50.0 07/31/25 14:16 08/05/25 14:18 <50.0 U mg/Kg (GRO)-C6-C10 50.0 07/31/25 14:16 08/05/25 14:18 Diesel Range Organics (Over <50.0 U mg/Kg C10-C28) <50.0 U 50.0 07/31/25 14:16 08/05/25 14:18 mg/Kg

Oil Range Organics (Over C28-C36)

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130	07/31/25 14:16	08/05/25 14:18	1
o-Terphenyl	94		70 - 130	07/31/25 14:16	08/05/25 14:18	1

Lab Sample ID: LCS 880-115529/2-A

**Matrix: Solid** 

Analysis Batch: 115840

**Client Sample ID: Lab Control Sample** 

Prep Type: Total/NA

**Prep Batch: 115529** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1069		mg/Kg		107	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	936.5		mg/Kg		94	70 - 130	
C10-C28)								

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

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

LCS LCS

Lab Sample ID: LCS 880-115529/2-A Client Sample ID: Lab Control Sample

**Matrix: Solid** 

Analysis Batch: 115840

Prep Type: Total/NA

**Prep Batch: 115529** 

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 104 70 - 130 o-Terphenyl 105 70 - 130

Lab Sample ID: LCSD 880-115529/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 115840

Prep Type: Total/NA

**Prep Batch: 115529** 

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 1068 107 70 - 130O 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 945.1 mg/Kg 95 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 105 70 - 130 1-Chlorooctane 103 70 - 130 o-Terphenyl

Lab Sample ID: 890-8555-A-7-E MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 115840

Prep Type: Total/NA

Prep Batch: 115529

Sample Sample MS MS Spike Analyte Added Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 999 908.0 mg/Kg 91 70 - 130 (GRO)-C6-C10 791.5 Diesel Range Organics (Over <50.0 U 999 mg/Kg 79 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 111 o-Terphenyl 111 70 - 130

Lab Sample ID: 890-8555-A-7-F MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** 

Analysis Batch: 115840

Prep Type: Total/NA

**Prep Batch: 115529** 

RPD %Rec

Sample Sample MSD MSD Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 999 916.0 92 Gasoline Range Organics <50.0 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 791.2 mg/Kg 79 70 - 130 20

C10-C28)

MSD MSD

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

Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE

SDG: 03C1558707

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

MD MD

96

91

Lab Sample ID: MB 880-115735/1-A

**Matrix: Solid** 

Analysis Batch: 115965

Client Sample ID: Method Blank

Prep Type: Total/NA

**Prep Batch: 115735** 

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		08/04/25 09:55	08/06/25 17:51	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		08/04/25 09:55	08/06/25 17:51	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		08/04/25 09:55	08/06/25 17:51	1
	MB	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

70 - 130

70 - 130

Lab Sample ID: LCS 880-115735/2-A

**Matrix: Solid** 

1-Chlorooctane

o-Terphenyl

Analysis Batch: 115965

**Client Sample ID: Lab Control Sample** 

08/06/25 17:51

08/06/25 17:51

08/04/25 09:55

08/04/25 09:55

Prep Type: Total/NA

**Prep Batch: 115735** 

	<b>Spike</b>	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	953.3		mg/Kg		95	70 - 130	 -
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	946.9		mg/Kg		95	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 98 70 - 130 o-Terphenyl 100 70 - 130

Lab Sample ID: LCSD 880-115735/3-A

**Matrix: Solid** 

Analysis Batch: 115965

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 115735

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1124		mg/Kg		112	70 - 130	16	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1138		mg/Kg		114	70 - 130	18	20
C10-C28)									

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	115		70 - 130
o-Terphenyl	118		70 - 130

Lab Sample ID: 890-8557-A-14-D MS

**Matrix: Solid** 

C10-C28)

Analysis Batch: 115965

Client Sample ID: Matrix Sp	oike
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Prep Type: Total/NA

**Prep Batch: 115735** 

MS MS Sample Sample Spike %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Gasoline Range Organics <49.9 U 1000 839.6 mg/Kg 84 70 - 130 (GRO)-C6-C10 <49.9 U 1000 779.6 70 - 130 Diesel Range Organics (Over mg/Kg 76

Prep Type: Total/NA

**Prep Batch: 115735** 

Prep Type: Total/NA

Job ID: 890-8560-1 Client: Ensolum Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

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

Lab Sample ID: 890-8557-A-14-D MS Client Sample ID: Matrix Spike

**Matrix: Solid** 

Analysis Batch: 115965

MS MS %Recovery Qualifier Limits

Surrogate 1-Chlorooctane 101 70 - 130 o-Terphenyl 96 70 - 130

Lab Sample ID: 890-8557-A-14-E MSD Client Sample ID: Matrix Spike Duplicate

**Matrix: Solid** 

Analysis Batch: 115965

Prep Batch: 115735 Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD Limit <49.9 U 1000 846.1 85 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 76 <49.9 U 777.5 mg/Kg 70 - 1300 20

C10-C28)

MSD MSD %Recovery Surrogate Qualifier Limits 70 - 130 1-Chlorooctane 101 96 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-115694/1-A Client Sample ID: Method Blank **Prep Type: Soluble** 

**Matrix: Solid** 

Analysis Batch: 115745

мв мв

Analyte Result Qualifier RL Unit D Dil Fac Prepared Analyzed 10.0 Chloride <10.0 U mg/Kg 08/04/25 11:48

Lab Sample ID: LCS 880-115694/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** 

Analysis Batch: 115745

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 260.4 mg/Kg 104 90 - 110

Lab Sample ID: LCSD 880-115694/3-A Client Sample ID: Lab Control Sample Dup

**Matrix: Solid** 

Analysis Batch: 115745

Spike LCSD LCSD %Rec RPD Added Analyte Result Qualifier Unit D %Rec Limits RPD Limit Chloride 250 263.6 105 90 - 110 20 mg/Kg

Lab Sample ID: 890-8560-5 MS Client Sample ID: BF - CALICHE

**Matrix: Solid** 

Analysis Batch: 115745

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier %Rec Limits Unit Chloride 207 251 458.3 mg/Kg 100 90 - 110

**Eurofins Carlsbad** 

**Prep Type: Soluble** 

**Prep Type: Soluble** 

### **QC Sample Results**

Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE

SDG: 03C1558707

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-8560-5 MSD Client Sample ID: BF - CALICHE

**Matrix: Solid Prep Type: Soluble** 

Analysis Batch: 115745 Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier Added Result Qualifier RPD Limit Analyte Unit %Rec Limits Chloride 207 251 452.0 mg/Kg 98 90 - 110 20

### **QC Association Summary**

Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

**GC VOA** 

**Prep Batch: 115648** 

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	5035	
890-8560-2	FS 03	Total/NA	Solid	5035	
890-8560-3	SW 01	Total/NA	Solid	5035	
890-8560-4	FS 01	Total/NA	Solid	5035	
890-8560-5	BF - CALICHE	Total/NA	Solid	5035	
MB 880-115648/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-115648/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-115648/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8554-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
890-8554-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 115668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	8021B	115648
890-8560-2	FS 03	Total/NA	Solid	8021B	115648
890-8560-3	SW 01	Total/NA	Solid	8021B	115648
890-8560-4	FS 01	Total/NA	Solid	8021B	115648
890-8560-5	BF - CALICHE	Total/NA	Solid	8021B	115648
MB 880-115648/5-A	Method Blank	Total/NA	Solid	8021B	115648
LCS 880-115648/1-A	Lab Control Sample	Total/NA	Solid	8021B	115648
LCSD 880-115648/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	115648
890-8554-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	115648
890-8554-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	115648

Analysis Batch: 115761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	Total BTEX	
890-8560-2	FS 03	Total/NA	Solid	Total BTEX	
890-8560-3	SW 01	Total/NA	Solid	Total BTEX	
890-8560-4	FS 01	Total/NA	Solid	Total BTEX	
890-8560-5	BF - CALICHE	Total/NA	Solid	Total BTEX	

**GC Semi VOA** 

Prep Batch: 115529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	8015NM Prep	· · ·
890-8560-2	FS 03	Total/NA	Solid	8015NM Prep	
890-8560-3	SW 01	Total/NA	Solid	8015NM Prep	
MB 880-115529/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-115529/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-115529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8555-A-7-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8555-A-7-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

**Prep Batch: 115735** 

Released to Imaging: 10/22/2025 10:00:13 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-4	FS 01	Total/NA	Solid	8015NM Prep	
890-8560-5	BF - CALICHE	Total/NA	Solid	8015NM Prep	
MB 880-115735/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-115735/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

### **QC Association Summary**

 Client: Ensolum
 Job ID: 890-8560-1

 Project/Site: PLU 201 FLOWLINE
 SDG: 03C1558707

### GC Semi VOA (Continued)

### Prep Batch: 115735 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-115735/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8557-A-14-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8557-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

### Analysis Batch: 115840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	8015B NM	115529
890-8560-2	FS 03	Total/NA	Solid	8015B NM	115529
890-8560-3	SW 01	Total/NA	Solid	8015B NM	115529
MB 880-115529/1-A	Method Blank	Total/NA	Solid	8015B NM	115529
LCS 880-115529/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	115529
LCSD 880-115529/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	115529
890-8555-A-7-E MS	Matrix Spike	Total/NA	Solid	8015B NM	115529
890-8555-A-7-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	115529

### Analysis Batch: 115959

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Total/NA	Solid	8015 NM	
890-8560-2	FS 03	Total/NA	Solid	8015 NM	
890-8560-3	SW 01	Total/NA	Solid	8015 NM	
890-8560-4	FS 01	Total/NA	Solid	8015 NM	
890-8560-5	BF - CALICHE	Total/NA	Solid	8015 NM	

### **Analysis Batch: 115965**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-4	FS 01	Total/NA	Solid	8015B NM	115735
890-8560-5	BF - CALICHE	Total/NA	Solid	8015B NM	115735
MB 880-115735/1-A	Method Blank	Total/NA	Solid	8015B NM	115735
LCS 880-115735/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	115735
LCSD 880-115735/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	115735
890-8557-A-14-D MS	Matrix Spike	Total/NA	Solid	8015B NM	115735
890-8557-A-14-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	115735

### HPLC/IC

### Leach Batch: 115694

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch		
890-8560-1	FS 02	Soluble	Solid	DI Leach			
890-8560-2	FS 03	Soluble	Solid	DI Leach			
890-8560-3	SW 01	Soluble	Solid	DI Leach			
890-8560-4	FS 01	Soluble	Solid	DI Leach			
890-8560-5	BF - CALICHE	Soluble	Solid	DI Leach			
MB 880-115694/1-A	Method Blank	Soluble	Solid	DI Leach			
LCS 880-115694/2-A	Lab Control Sample	Soluble	Solid	DI Leach			
LCSD 880-115694/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach			
890-8560-5 MS	BF - CALICHE	Soluble	Solid	DI Leach			
890-8560-5 MSD	BF - CALICHE	Soluble	Solid	DI Leach			

### Analysis Batch: 115745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-1	FS 02	Soluble	Solid	300.0	115694

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### **QC Association Summary**

Client: Ensolum
Project/Site: PLU 201 FLOWLINE
Job ID: 890-8560-1
SDG: 03C1558707

### **HPLC/IC** (Continued)

### **Analysis Batch: 115745 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8560-2	FS 03	Soluble	Solid	300.0	115694
890-8560-3	SW 01	Soluble	Solid	300.0	115694
890-8560-4	FS 01	Soluble	Solid	300.0	115694
890-8560-5	BF - CALICHE	Soluble	Solid	300.0	115694
MB 880-115694/1-A	Method Blank	Soluble	Solid	300.0	115694
LCS 880-115694/2-A	Lab Control Sample	Soluble	Solid	300.0	115694
LCSD 880-115694/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	115694
890-8560-5 MS	BF - CALICHE	Soluble	Solid	300.0	115694
890-8560-5 MSD	BF - CALICHE	Soluble	Solid	300.0	115694

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SDG: 03C1558707

Client Sample ID: FS 02

Client: Ensolum

Lab Sample ID: 890-8560-1

Matrix: Solid

Date Collected: 08/01/25 11:20 Date Received: 08/01/25 15:53

Project/Site: PLU 201 FLOWLINE

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	115648	08/03/25 16:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115668	08/03/25 21:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115761	08/03/25 21:02	SA	EET MID
Total/NA	Analysis	8015 NM		1			115959	08/05/25 20:17	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	115529	07/31/25 14:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115840	08/05/25 20:17	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	115694	08/04/25 08:25	SI	EET MIC
Soluble	Analysis	300.0		1			115745	08/04/25 13:27	SMC	EET MID

**Client Sample ID: FS 03** Lab Sample ID: 890-8560-2 Matrix: Solid

Date Collected: 08/01/25 11:47

Date Received: 08/01/25 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	115648	08/03/25 16:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115668	08/03/25 21:22	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115761	08/03/25 21:22	SA	EET MID
Total/NA	Analysis	8015 NM		1			115959	08/05/25 20:32	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	115529	07/31/25 14:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115840	08/05/25 20:32	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	115694	08/04/25 08:25	SI	EET MID
Soluble	Analysis	300.0		1			115745	08/04/25 13:35	SMC	EET MID

Client Sample ID: SW 01 Lab Sample ID: 890-8560-3 Date Collected: 08/01/25 12:01 **Matrix: Solid** 

Date Received: 08/01/25 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	115648	08/03/25 16:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115668	08/03/25 21:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115761	08/03/25 21:43	SA	EET MID
Total/NA	Analysis	8015 NM		1			115959	08/05/25 20:47	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	115529	07/31/25 14:16	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115840	08/05/25 20:47	TKC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	115694	08/04/25 08:25	SI	EET MID
Soluble	Analysis	300.0		1			115745	08/04/25 13:43	SMC	EET MID

Client Sample ID: FS 01 Lab Sample ID: 890-8560-4

Date Collected: 07/31/25 14:37 Date Received: 08/01/25 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	115648	08/03/25 16:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115668	08/03/25 22:03	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115761	08/03/25 22:03	SA	EET MID

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**Matrix: Solid** 

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Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE SDG: 03C1558707

Client Sample ID: FS 01

Date Received: 08/01/25 15:53

Lab Sample ID: 890-8560-4 Date Collected: 07/31/25 14:37 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			115959	08/06/25 21:32	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	115735	08/04/25 09:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115965	08/06/25 21:32	TKC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	115694	08/04/25 08:25	SI	EET MID
Soluble	Analysis	300.0		1			115745	08/04/25 13:50	SMC	EET MID

Client Sample ID: BF - CALICHE Lab Sample ID: 890-8560-5

Date Collected: 07/31/25 12:01 Matrix: Solid

Date Received: 08/01/25 15:53

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	115648	08/03/25 16:00	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	115668	08/03/25 23:37	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			115761	08/03/25 23:37	SA	EET MID
Total/NA	Analysis	8015 NM		1			115959	08/06/25 22:04	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	115735	08/04/25 09:55	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	115965	08/06/25 22:04	TKC	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	115694	08/04/25 08:25	SI	EET MID
Soluble	Analysis	300.0		1			115745	08/04/25 13:58	SMC	EET MID

Laboratory References:

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

**Eurofins Carlsbad** 

### **Accreditation/Certification Summary**

Client: Ensolum
Project/Site: PLU 201 FLOWLINE
SDG: 03C1558707

**Laboratory: Eurofins Midland** 

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

Authority	Progra	am	Identification Number	Expiration Date	
Texas	NELA	Р	T104704400	06-30-26	
,	are included in this report, bu	it the laboratory is not certif	fied by the governing authority. This lis	t may include analytes	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		
Total BTEX		Solid	Total BTEX		

1

5

7

9

10

12

4 /

### **Method Summary**

Client: Ensolum Job ID: 890-8560-1 Project/Site: PLU 201 FLOWLINE

SDG: 03C1558707

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 Carlsbad** 

### **Sample Summary**

Client: Ensolum

Project/Site: PLU 201 FLOWLINE

Job ID: 890-8560-1

SDG: 03C1558707

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8560-1	FS 02	Solid	08/01/25 11:20	08/01/25 15:53	1
890-8560-2	FS 03	Solid	08/01/25 11:47	08/01/25 15:53	1
890-8560-3	SW 01	Solid	08/01/25 12:01	08/01/25 15:53	0-1
890-8560-4	FS 01	Solid	07/31/25 14:37	08/01/25 15:53	1
890-8560-5	BF - CALICHE	Solid	07/31/25 12:01	08/01/25 15:53	

Circle Method(s) and Metal(s) to be analyzed

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba

TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se

Hg: 1631 / 245.1 / 7470 / 7471

Ag SiO<sub>2</sub>

Na Sr Tl Sn U V Zn

13 14

Project Manager: eurofins **Environment Testing** me V Bill to: (if different) Midland, TX (432) EL Paso, TX (91: Hobbs, NM (575 Houston, TX (2 Chain of Custody

81) 240-4200, Dallas, TX (214) 902-0300 704-5440, San Antonio, TX (210) 509-3334	Work Order No:
s) 585-3443, Lubbock, TX (806) 794-1296	
5) 392-7550, Carlsbad, NM (575) 988-3199	
	www.xenco.com Pageof
X To Energy, Inc	Work Order Comments
X TO Energy Inc	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
3204 F Greene St	State of Project:
Carlstad NM 88220	Reporting: Level III   Level III   PST/UST   TRRP   Level IV
	Deliverables: EDD ADaPT Other:

otice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions feering in the control of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control surofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated Relinquished by: (Signature) Samo www. Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Revised Date: 08/25/2020 Rev. 2020.2 Date/Time

Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>: NaSO<sub>3</sub>

NaHSO 4: NABIS

Zn Acetate+NaOH: Zn

NaOH+Ascorbic Acid: SAPC

Sample Comments

H<sub>3</sub>PO<sub>4</sub>: HP H<sub>2</sub>S0 <sub>4</sub>: H<sub>2</sub>

HCI: HC

NaOH: Na HNO 3: HN MeOH: Me

Cool: Cool

None: NO

DI Water: H<sub>2</sub>O

Preservative Codes

Total Containers:

Sample Identification

Matrix

Sampled

Sampled

Depth

Comp Grab/

Cont # of

Date

Time

08/04/25

11,20

1503 1503

-(a)

-07/34/5 14:37

72.0

12:01 44:75

0

Cooler Custody Seals:

Sample Custody Seals:

Yes No Yes

No N/A

Correction Factor: Thermometer ID:

G unoc Yes

Temperature Reading:

Corrected Temperature:

9

Samples Received Intact:

SAMPLE RECEIPT

emp Blank:

Yes No

Wet Ice:

No

5 02 8

> 4 \$00

890-8560 Chain of Custody

**Parameters** 

the lab, if received by 4:30pm TAT starts the day received by

Sampler's Name:

LENOL

Margo 30040

Due Date:

Routine

Rush

Code

Turn Around

Email:

City, State ZIP:

195

Maries

to

Address:

Company Name:

City, State ZIP:

roject Name:

roject Number: oject Location:

Company Name: Address:

### **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-8560-1 SDG Number: 03C1558707

Login Number: 8560 List Source: Eurofins Carlsbad

List Number: 1

Creator: Bruns, Shannon

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

### **Login Sample Receipt Checklist**

Client: Ensolum Job Number: 890-8560-1

SDG Number: 03C1558707

Login Number: 8560 **List Source: Eurofins Midland** List Number: 2 List Creation: 08/03/25 03:56 PM

Creator: Rios, Minerva

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

<6mm (1/4").



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

August 12, 2025

**ASHLEY HOLMES** 

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: PLU 201 FLOWLINE

Enclosed are the results of analyses for samples received by the laboratory on 08/11/25 13:01.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at <a href="https://www.tceq.texas.gov/field/qa/lab">www.tceq.texas.gov/field/qa/lab</a> accred certif.html.

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

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

Celey D. Keine

Accreditation applies to public drinking water matrices.

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

Sincerely,

Celey D. Keene

Lab Director/Quality Manager



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

### Analytical Results For:

ENSOLUM, LLC ASHLEY HOLMES 705 W WADLEY AVE. MIDLAND TX, 79705 Fax To:

 Received:
 08/11/2025
 Sampling Date:
 08/11/2025

 Reported:
 08/12/2025
 Sampling Type:
 Soil

Project Name: PLU 201 FLOWLINE Sampling Condition: \*\*\* (See Notes)
Project Number: 03C1558707 Sample Received By: Shalyn Rodriguez

Project Location: XTO 32.229937, -103.911117

### Sample ID: FS04 1' (H254917-01)

BTEX 8021B	mg	/kg	Analyze	d By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	08/11/2025	ND	1.92	95.9	2.00	3.91	
Toluene*	<0.050	0.050	08/11/2025	ND	1.96	98.0	2.00	1.57	
Ethylbenzene*	<0.050	0.050	08/11/2025	ND	1.94	97.1	2.00	0.665	
Total Xylenes*	<0.150	0.150	08/11/2025	ND	5.74	95.6	6.00	0.920	
Total BTEX	<0.300	0.300	08/11/2025	ND					
Surrogate: 4-Bromofluorobenzene (PID	94.8	% 71.5-13	4						
Chloride, SM4500CI-B	mg,	/kg	Analyze	d By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	288	16.0	08/12/2025	ND	416	104	400	7.41	
TPH 8015M	mg,	/kg	Analyze	d By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	08/11/2025	ND	197	98.5	200	1.19	
DRO >C10-C28*	<10.0	10.0	08/11/2025	ND	195	97.3	200	0.339	
EXT DRO >C28-C36	<10.0	10.0	08/11/2025	ND					
Surrogate: 1-Chlorooctane	110	% 44.4-14	5						
Surrogate: 1-Chlorooctadecane	116	% 40.6-15	3						

### Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keine

Celey D. Keene, Lab Director/Quality Manager



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

### **Notes and Definitions**

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

\*\* Samples not received at proper temperature of 6°C or below.

\*\*\* Insufficient time to reach temperature.

- Chloride by SM4500Cl-B does not require samples be received at or below 6°C

Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories \*=Accredited Analyte

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

Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager

# CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

	4	
101 East Marland, Hobbs, NM 88240 (575) 393-2326 FAX (575) 393-2476	Laboratories	

(575) 393-2326 FAX (575) 393-2476	X (575) 393-2476		SISA IVNV	REQUEST
Company Name: Ensolum, LLC		BILL TO	ANOLICI	
Project Manager: ASh PN Yo	Mes	P.O. #:		
Address: 601 N Marienfeld Street, Suite 400	te 400	Company: XIO Energy, Inc		
City: Midland	State: TX Zip: 79701	Attn: Colton Brown		
713)827-	1947Fax #:	Address: 3104 E Greene St		
030 1	Project Owner: XTO Energy	City: Carlsbad		
ame: PL		State: NM Zip: 88220		
37 729	37-103,911117	Phone #:		
Torror Warn		Fax #:		
e. INVVV	MATRIX	PRESERV. SAMPLING	G	
Lab I.D. Sample I.D.	(feet)  S)RAB OR (C)OMP. CONTAINERS ROUNDWATER VASTEWATER OIL OIL SLUDGE	OTHER: CCID/BASE: CE / COOL OTHER:	TPH 8015 BTEX 8021 Chloride 4500	
FSOY	H	V 08/11/12801,56	///	
PLEASE NOTE: Liability and Damages, Cardinal's liability and analyses, All claims including those for negligence and any other than the newest shall Cardinal be liable for incidental or control to the control of the	PLASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the applicable rankyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable rankyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable rankyses. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable rankyses.	act or tort, shall be limited to the amount paid by and received by Cardinal within 30 days after or and received by Clardinal within 30 days after or and received by client of the above stated reacting, loss of use, or loss of profits incurred by clients, loss of use, or loss of profits incurred by clients.		
affiliates or successors arising out of or related to the performance Relinquished By:	Control   Cont		It:   Yes  re emailed.  olum.com, The colum.com, The colum.com, The column.com, The column.com	Thomason@ensolum.com  Thurson@ensolum.com  Thurson@ensolum.com  Thurson@ensolum.com
Relinquished By:	20 (		mber n APP 25 in 11378010 805000	252044663Z
Delivered By: (Circle One)	Observed Temp. °C Sample Condition Cool Intact	CHECKED BY (Initials)	Standard N	Bacteria (only) Sample Condition Cool Intact Observed Temp. °C
Sampler - UPS - Bus - Other:	Corrected Temp. °C 20.01 Pes 1	is SRZ	Correction Factor -0.5°C + +0 3	No No Corrected Temp. °C

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

Phone: (505) 629-6116
Online Phone Directory
https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS

Action 517962

### **QUESTIONS**

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2520446632
Incident Name	NAPP2520446632 PLU 201 @ K-07-24S-30E
Incident Type	Other
Incident Status	Remediation Closure Report Received

Location of Release Source	
Please answer all the questions in this group.	
Site Name	PLU 201
Date Release Discovered	07/21/2025
Surface Owner	Federal

ncident Details		
Please answer all the questions in this group.		
Incident Type	Other	
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 fo	r 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: 2 BBL   Recovered: 1 BBL   Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion   Flow Line - Production   Produced Water   Released: 4 BBL   Recovered: 1 BBL   Lost: 3 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.

General Information Phone: (505) 629-6116

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

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

QUESTIONS, Page 2

Action 517962

QUESTIONS (continued)

Operator:	OGRID:
XTO ENERGY, INC 6401 Holiday Hill Road	5380 Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)
QUESTIONS	
Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e.	gas only) are to be submitted on the C-129 form.
Initial Response	
The responsible party must undertake the following actions immediately unless they could create a sa	afety hazard that would result in injury.
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.
	ttion immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative c ad or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of valuation in the follow-up C-141 submission.
to report and/or file certain release notifications and perform corrective actions for relea- the OCD does not relieve the operator of liability should their operations have failed to a	nowledge and understand that pursuant to OCD rules and regulations all operators are required ses which may endanger public health or the environment. The acceptance of a C-141 report by dequately investigate and remediate contamination that pose a threat to groundwater, surface does not relieve the operator of responsibility for compliance with any other federal, state, or
I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 10/20/2025

General Information Phone: (505) 629-6116 Online Phone Directory

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

### Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr.

**Santa Fe, NM 87505** 

**State of New Mexico** 

QUESTIONS, Page 3

Action 517962

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Site Characterization	
Please answer all the questions in this group (only required when seeking remediation plan approva release discovery date.	l and beyond). This information must be provided to the appropriate district office no later than 90 days after the
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	OCD Imaging Records Lookup
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release ar	nd the following surface areas:
A continuously flowing watercourse or any other significant watercourse	Between 1000 (ft.) and ½ (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 300 and 500 (ft.)
Any other fresh water well or spring	Between 300 and 500 (ft.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

are indicated. This information must be provided to	o the appropriate district office no later than 90 days after the release discovery date.
oval with this submission	Yes
the lateral and vertical extents of soil contamination	on associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.
of contamination been fully delineated	Yes
vithin a lined containment area	No
the highest observable value for each, in n	nilligrams per kilograms.)
PA 300.0 or SM4500 Cl B)	434
SW-846 Method 8015M)	0
PA SW-846 Method 8015M)	0
PA SW-846 Method 8021B or 8260B)	0
PA SW-846 Method 8021B or 8260B)	0
s the site characterization report includes complete eginning and completing the remediation.	ed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMA0
ediation commence	07/31/2025
mpling or liner inspection occur	08/11/2025
iation complete(d)	08/11/2025
n square feet) that will be reclaimed	670
ic yards) that will be reclaimed	15
n square feet) that will be remediated	670
ic yards) that will be remediated	15
recognized to be the best guess or calculation at t	the time of submission and may (be) change(d) over time as more remediation efforts are completed.
	oval with this submission  the lateral and vertical extents of soil contamination of contamination been fully delineated  vithin a lined containment area the highest observable value for each, in no PA 300.0 or SM4500 CI B)  SW-846 Method 8015M) PA SW-846 Method 8015M) PA SW-846 Method 8021B or 8260B) PA SW-846 Method 8021B or 8260B) PA SW-846 Method 8021B or 8260B)  So the site characterization report includes complete eginning and completing the remediation.  Rediation commence Impling or liner inspection occur ination complete(d) In square feet) that will be reclaimed In square feet) that will be remediated In square feet) that will be remediated In square feet) that will be remediated

significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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

Phone: (505) 629-6116 Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

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

QUESTIONS, Page 4

Action 517962

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Remediation Plan (continued)	
Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.	
This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:	
(Select all answers below that apply.)	
(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

er 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.

Name: Richard Kotzur Title: Senior Project Manager I hereby agree and sign off to the above statement Email: NMEnvNotifications@exxonmobil.com Date: 10/20/2025

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

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

QUESTIONS, Page 5

Action 517962

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

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

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Phone: (505) 629-6116
Online Phone Directory
<a href="https://www.emnrd.nm.gov/ocd/contact-us">https://www.emnrd.nm.gov/ocd/contact-us</a>

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

QUESTIONS, Page 6

Action 517962

**QUESTIONS** (continued)

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	492809
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	08/12/2025
What was the (estimated) number of samples that were to be gathered	8
What was the sampling surface area in square feet	1600

Remediation Closure Request	
Only answer the questions in this group if seeking remediation closure for this release because all re	emediation steps have been completed.
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	670
What was the total volume (cubic yards) remediated	15
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	670
What was the total volume (in cubic yards) reclaimed	15
Summarize any additional remediation activities not included by answers (above)	Site assessment and excavation activities were conducted at the Site to address the July 21, 2025, release of crude oil and produced water. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated that all COC concentrations were compliant with the Site Closure Criteria and reclamation requirement. Based on the soil sample analytical results, no further remediation was required. XTO backfilled the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The release and excavation areas were located within Gavilan Road so reseeding of the area will occur following the lease road abandonment. Excavation of impacted soil has mitigated potential impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the Site. XTO believes these remedial actions are protective of human health, the environment, and groundwater.

The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager
	Email: NMEnvNotifications@exxonmobil.com
	Date: 10/20/2025

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

QUESTIONS, Page 7

Action 517962

**QUESTIONS** (continued)

Operator:	OGRID:
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6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### QUESTIONS

Reclamation Report	
Only answer the questions in this group if all reclamation steps have been completed.	
Requesting a reclamation approval with this submission	No

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

CONDITIONS

Action 517962

### **CONDITIONS**

Operator:	OGRID:
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6401 Holiday Hill Road	Action Number:
Midland, TX 79707	517962
	Action Type:
	[C-141] Remediation Closure Request C-141 (C-141-v-Closure)

### CONDITIONS

Created By	Condition	Condition Date
michael.buchanan	Remediation closure is approved.	10/22/2025