



November 21, 2025

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

**Re: Deferral Request**  
**PLU BS 07-25-31 Battery**  
**Incident Number nAPP2434831355**  
**Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc (XTO), has prepared this *Deferral Request* to document the findings of a liner integrity inspection and delineation activities conducted at the PLU BS 07-25-31 Battery (Site) following a release of crude oil within a 3,543 square foot steel, lined containment. The containment houses vertical and horizontal separators and surface production piping. Based on field observations and soil sample laboratory analytical results, XTO is submitting this *Deferral Request*, describing the inspection results and requesting deferral of final remediation for Incident Number nAPP2434831355 until the Site and/or containment is reconstructed, and/or the well pad is abandoned.

## SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit C, Section 07, Township 25 South, Range 31 East, in Eddy County, New Mexico (32.152160°, -103.818977°) and is associated with oil and gas exploration and production operations on Federal land managed by the Bureau of Land Management (BLM).

On December 12, 2024, while performing maintenance activities, the heater treater filled with crude oil causing oil to carry over through the supply gas scrubber and into impermeable containment. Approximately 10 barrels (bbls) of crude oil into a lined containment. A vacuum truck was dispatched to the Site to recover free-standing fluids, and all fluids were recovered. The lined containment was power washed to remove any residual fluids. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via a Notification of Release (NOR) on December 13, 2024, and subsequently submitted an Initial C-141 Application (C-141) on December 16, 2024. The release was assigned Incident Number nAPP2434831355.

## SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of 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. On November 14, 2015, New Mexico Office of State

XTO Energy, Inc  
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Engineer (OSE) permitted well (C-3891) was advanced to a depth of 635 feet below ground surface (bgs) approximately 0.78 miles northwest of the Site. The recorded depth to groundwater was 429 feet bgs. The Well Record & Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash located approximately 15,388 feet southwest 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. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by potentially unstable geology (low potential karst designation area).

Based on the results of the Site Characterization, and the NMOCD's preference for groundwater data within half a mile of the Site and within 25 years, 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

## LINER INTEGRITY INSPECTION ACTIVITIES

A 48-hour advanced notice of the liner inspection was submitted to the NMOCD on August 21, 2025. The lined containment was cleaned of all debris and power washed and a liner integrity inspection was conducted by Ensolum personnel on August 26, 2025. The lined containment was inspected, and it was determined to contain a small hole. The hole was observed in the floor of the lined containment near surface piping on the central portion near the eastern wall of the lined containment. No peeling or damage was observed to the walls of the lined containment. Delineation to determine the presence or absence of impacts to soil beneath the tear was warranted. A Site map of the lined containment is included in Figure 2. Photographic documentation of the inspection is included in Appendix B.

## DELINeATION SOIL SAMPLING ACTIVITIES

Between September 3 and September 20, 2025, Ensolum personnel were at the Site to oversee delineation activities. Four delineation soil samples (SS01 through SS04) were collected around the lined containment from ground surface to confirm the release remained within the lined containment walls. One borehole (BH01) was advanced via hand auger to a terminal depth of 1-foot bgs in the location of the tear in the liner. The delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Field screening results and observations of the soil samples from the borehole were logged on a lithologic/soil sampling log, which is included in Appendix C. The delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation 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 were transported under strict chain-of-custody procedures to Cardinal Laboratories (Cardinal) in Hobbs, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental

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Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standard Method SM4500.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples SS01 through SS04 indicated all COCs were in compliance with Site Closure Criteria, confirming the release did not breach the steel walls of the lined containment. Laboratory analytical results for delineation soil samples from borehole BH01 indicated TPH concentrations exceeded Site Closure Criteria at 0.5 feet bgs but all COC concentrations were in compliance with Site Closure Criteria at 1-foot bgs, successfully defining the vertical extent of the release. Laboratory analytical results are summarized in Table 1, and the laboratory analytical reports are included in Appendix D.

## DEFERRAL REQUEST

XTO is requesting deferral of final remediation due to the presence of active separator equipment and surface piping located within the steel lined containment. The impacted soil is limited to the area directly below the containment liner and active production equipment within the lined containment, where remediation would require a major facility deconstruction and multiple weeks of facility shutdown due to absence of spill control measures. The impacted soil remaining in place is delineated vertically by delineation soil sample BH01A, collected at 1-foot bgs. Analytical results for delineation soil samples SS01 through SS04 collected outside the lined containment indicated COC concentrations below the most stringent Table I Closure Criteria, confirming the release was laterally contained by the containment walls. A maximum of 131 cubic yards of impacted soil remains in place, assuming a maximum lateral extent of 3,543 square feet, which is the footprint of the lined containment area. The extent of impacted soil is expected to be significantly lower as the remainder of the liner along the floor of the containment was operating as designed.

XTO does not believe deferment will result in imminent risk to human health, the environment, or groundwater. Depth to groundwater was determined to be greater than 100 feet bgs and the impacted soil remaining in place is limited in aerial and vertical extent. The lined containment, following restoration utilizing a spray-on non-invasive impermeable coating provides spill control without requiring major deconstruction and effectively minimizes additional impact migration by preventing the infiltration and movement of rainwater influences.

Based on the presence of active production equipment and a lined containment and the complete lateral and vertical delineation of impacted soil remaining in place, XTO requests deferral of final remediation for Incident Number nAPP2434831355 until final reclamation of the well pad or major construction, whichever comes first.

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

Sincerely,  
**Ensolum, LLC**



Tabitha Guardian  
Staff Geologist



Tacoma Morrissey  
Associate Principal

Cc: Robert Woodall, XTO  
Richard Kotzur, XTO  
BLM

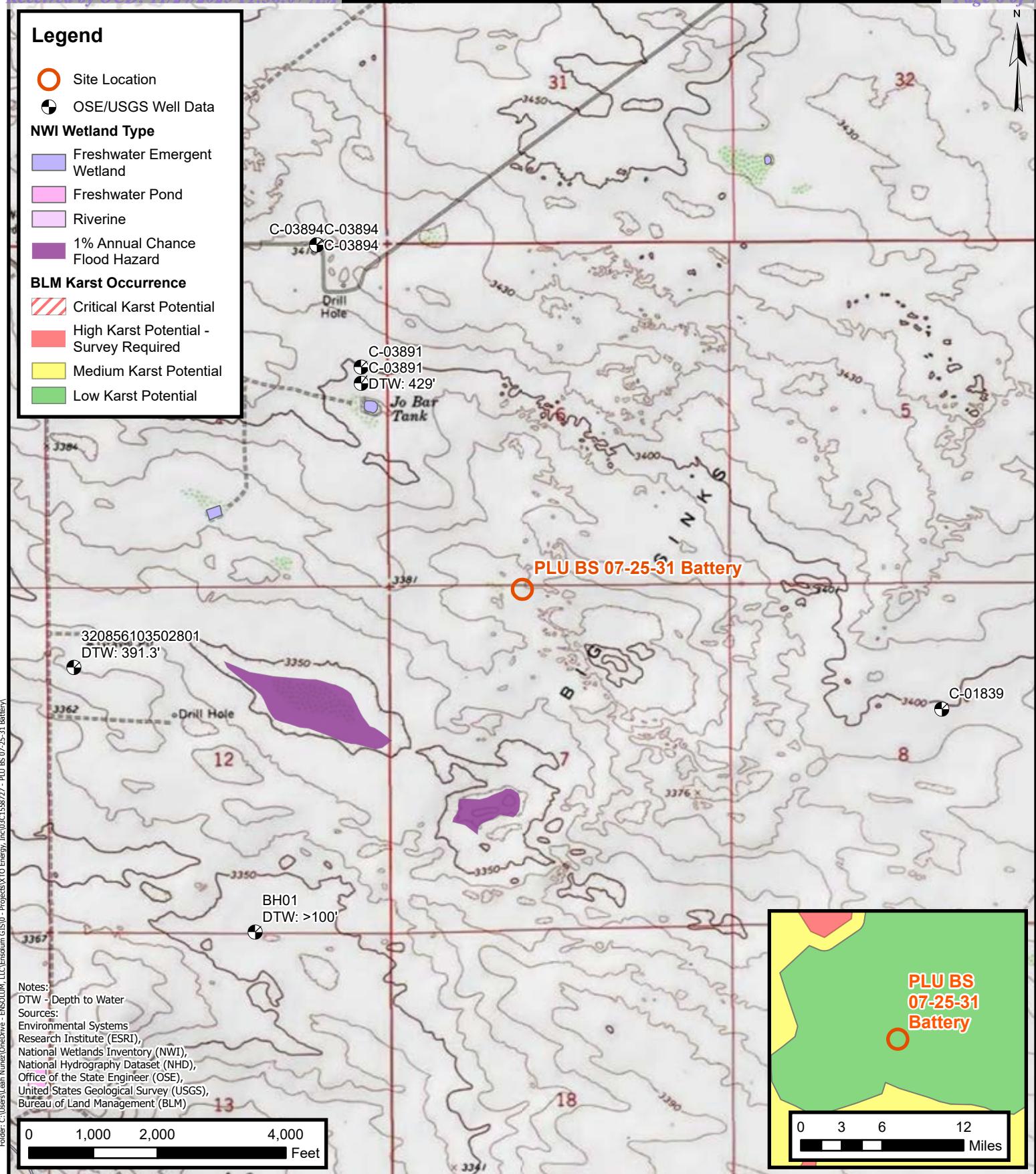
Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Site Map
- Table 1 Soil Sample Analytical Results
- Appendix A Referenced Well Records
- Appendix B Photographic Log
- Appendix C Lithologic / Soil Sampling Logs
- Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation
- Appendix E Spill Volume Calculation



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## FIGURES



## Site Receptor Map

XTO Energy, Inc  
PLU BS 07-25-31 Battery  
Incident Number: nAPP2434831355  
Unit C, Section 07, T 25S, R 31E  
Eddy County, New Mexico



Environmental, Engineering and  
Hydrogeologic Consultants

**FIGURE**  
**1**



### Legend

- Delineation Soil Sample in Compliance with Closure Criteria
- Lined Containment/Deferral Area



Notes:  
Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



Environmental, Engineering and  
Hydrogeologic Consultants

## Delineation Soil Sample Locations

XTO Energy, Inc  
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Unit C, Section 07, T 25S, R 31E  
Eddy County, New Mexico

**FIGURE  
2**



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## TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**PLU BS 07-25-31 Battery**  
**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
<b>Delineation Soil Samples</b>										
SS01	09/16/25	Surface	<0.00200	<0.00399	<49.7	95.9	<49.7	95.9	95.9	209
SS02	09/20/25	Surface	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	127
SS03	09/16/25	Surface	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	468
SS04	09/16/25	Surface	<0.00198	<0.00397	<49.6	<49.6	<49.6	<49.6	<49.6	122
BH01	09/03/25	0.5	<0.050	<0.300	<10.0	625	99.2	625	<b>724</b>	80.0
BH01A	09/03/25	1	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	32.0

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



## APPENDIX A

### Referenced Well Records



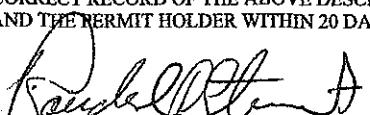
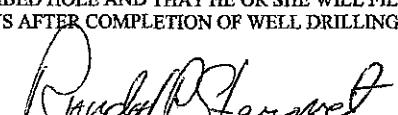
**WELL RECORD & LOG**  
**OFFICE OF THE STATE ENGINEER**  
[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
 ROSWELL, NEW MEXICO

2015 DEC -4 AM 10:03

<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NUMBER (WELL NUMBER) C-3891 POD-2				OSE FILE NUMBER(S) C-3891			
	WELL OWNER NAME(S) Enterprise Partners L.P.				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 1100 Louisiana St. Rm11.104				CITY Houston	STATE TX	ZIP 77002	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE	32	9	39.8	N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND * DATUM REQUIRED: WGS 84	
		LONGITUDE	103	49	37.1	W		
	DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE 15 miles southeast of Malaga, NM      Section 1 Township 25S Range 30E							
	LICENSE NUMBER WD-1723		NAME OF LICENSED DRILLER Randy Stewart			NAME OF WELL DRILLING COMPANY Stewart Bros. Drilling		
	DRILLING STARTED 11/10/15	DRILLING ENDED 11/14/15	DEPTH OF COMPLETED WELL (FT) 635	BORE HOLE DEPTH (FT) 650		DEPTH WATER FIRST ENCOUNTERED (FT) 429		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) 429		
	DRILLING FLUID: <input type="checkbox"/> AIR <input checked="" type="checkbox"/> MUD		ADDITIVES - SPECIFY:					
DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL		OTHER - SPECIFY:						
DEPTH (feet bgf)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)		CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM 0	TO 20	18	J-55 Steel		N/A	12.625	.375	N/A
20	459	12.250	ATSM A53 grade B steel		Weld	6.125	.250	N/A
459	460	12.250	Dissimilar metal adapter		Weld	6.125	.250	N/A
460	635	12.250	ASTM A778 304 Stainless Steel		Weld	6.125	.250	1/16
635	650	12.250	None		N/A	N/A	N/A	
DEPTH (feet bgf)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL			AMOUNT (cubic feet)	METHOD OF PLACEMENT	
FROM 0	TO 5	12.250	1/4" Pea Gravel			3	Tremie	
5	427	12.250	Neat Cement			245	Tremie	
427	429	12.250	#100 fine sand			2	Tremie	
429	650	12.250	8-12 Sand			149	Tremie	
FOR OSE INTERNAL USE								
FILE NUMBER C-3891	POD NUMBER 2	TRN NUMBER 571228						
LOCATION TSS 30E 1.2.4.4	Monitor		PAGE 1 OF 2					

STATE ENGINEER OFFICE  
ROSWELL, NEW MEXICO

DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	2015 DEC 20	-4 10:03	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
FROM	TO			WATER BEARING? (YES / NO)		
0	20	20	Caliche- hard medium to fine sand	Y ✓ N		
20	50	30	Sand- tan, medium to fine grained, some silt	Y ✓ N		
50	180	130	Sand- light brown,medium to fine grained, poorly graded, some silt	Y ✓ N		
180	200	20	Silty sand- light brown, well graded	Y ✓ N		
200	210	10	Sand- lt. brown, medium to fine grain, poorly graded, some silt, few fine gravel	Y ✓ N		
210	280	70	Clayey silt- reddish brown, fine to medium sand	Y ✓ N		
280	360	80	Silty sand-light brown,medium to fine grained,reddish silt	Y ✓ N		
360	420	60	Sand-light brown,medium to fine grained,well graded,few gravel	Y ✓ N		
420	450	30	Sand-tan,fine grained,some silt	✓ Y N		
450	460	10	Silty sand-reddish brown,fine to medium grained	✓ Y N		
460	490	30	Sand,tan,fine grained,some silt	✓ Y N		
490	500	10	Sand-tan,fine grained,some silt,few fine gravel	✓ Y N		
500	530	30	Clayey silt-reddish brown,some fine sand	✓ Y N		
530	635	105	Silty sand-light brown,medium to fine grained	✓ Y N		
635	650	15	Mudstone-Red	Y ✓ N		
				Y N		
				Y N		
				Y N		
				Y N		
				Y N		
				Y N		
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:				TOTAL ESTIMATED WELL YIELD (gpm): <b>334</b>		
<input checked="" type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:				WELL YIELD (gpm): <b>334</b>		
5. TEST; RIG SUPERVISION						
WELL TEST		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION: 18 hr. drawdown= 67.5' @33gpm, well yield exceeds 33 GPM						
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Danny L White						
6. SIGNATURE						
THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
 				12/1/15		
SIGNATURE OF DRILLER / PRINT SIGHNEE NAME				DATE		

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/08/2012)

FILE NUMBER	C-3891	POD NUMBER	2	TRN NUMBER	571228
LOCATION	25S.30E.1.2-444	Monitor			PAGE 2 OF 2



## APPENDIX B

### Photographic Log

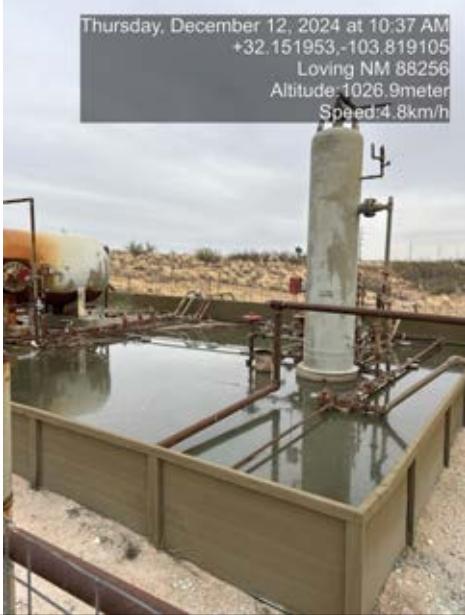


### Photographic Log

XTO Energy, Inc.

PLU BS 07-25-31 Battery

Eddy County, New Mexico



Photograph: 1

Date: 12/12/2024

Description: Initial release

View: Northeast



Photograph: 2

Date: 8/26/2025

Description: Facility sign

View: Direct



Photograph: 3

Date: 8/26/2025

Description: Liner inspection activities

View: East



Photograph: 4

Date: 8/26/2025

Description: Liner inspection activities

View: Southeast



### Photographic Log

XTO Energy, Inc.

PLU BS 07-25-31 Battery

Eddy County, New Mexico



Photograph: 5

Date: 8/26/2025

Description: Liner inspection activities

View: North

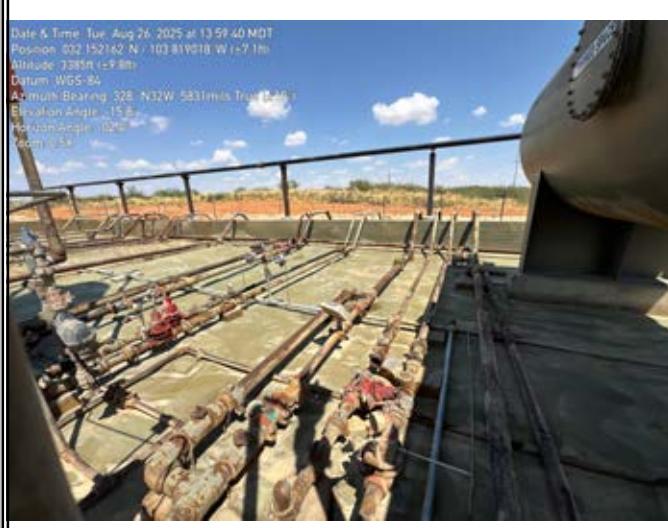


Photograph: 6

Date: 8/26/2025

Description: Liner inspection activities

View: Southwest



Photograph: 7

Date: 8/26/2025

Description: Liner inspection activities near BH01

View: Northeast



Photograph: 8

Date: 8/26/2025

Description: Identified hole in liner near BH01

View: Direct

**Photographic Log**

XTO Energy, Inc.

PLU BS 07-25-31 Battery

Eddy County, New Mexico



Photograph: 9

Date: 9/3/2025

Description: Delineation activities near BH01

View: Southeast



Photograph: 10

Date: 9/3/2025

Description: Liner patching activities

View: North

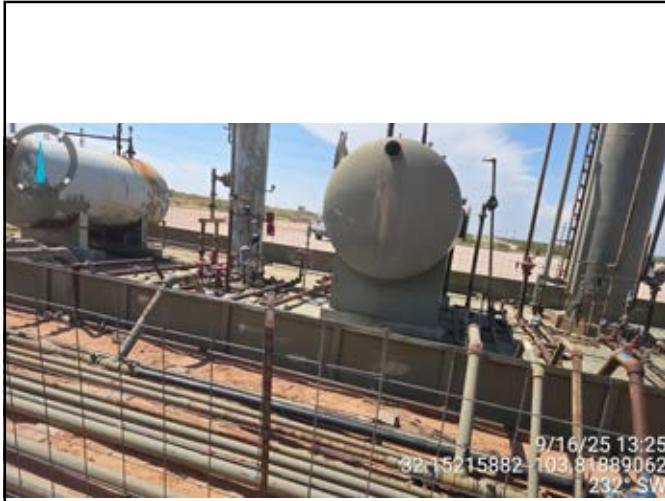


Photograph: 11

Date: 9/16/2025

Description: Delineation activities near SS03

View: East



Photograph: 12

Date: 9/16/2025

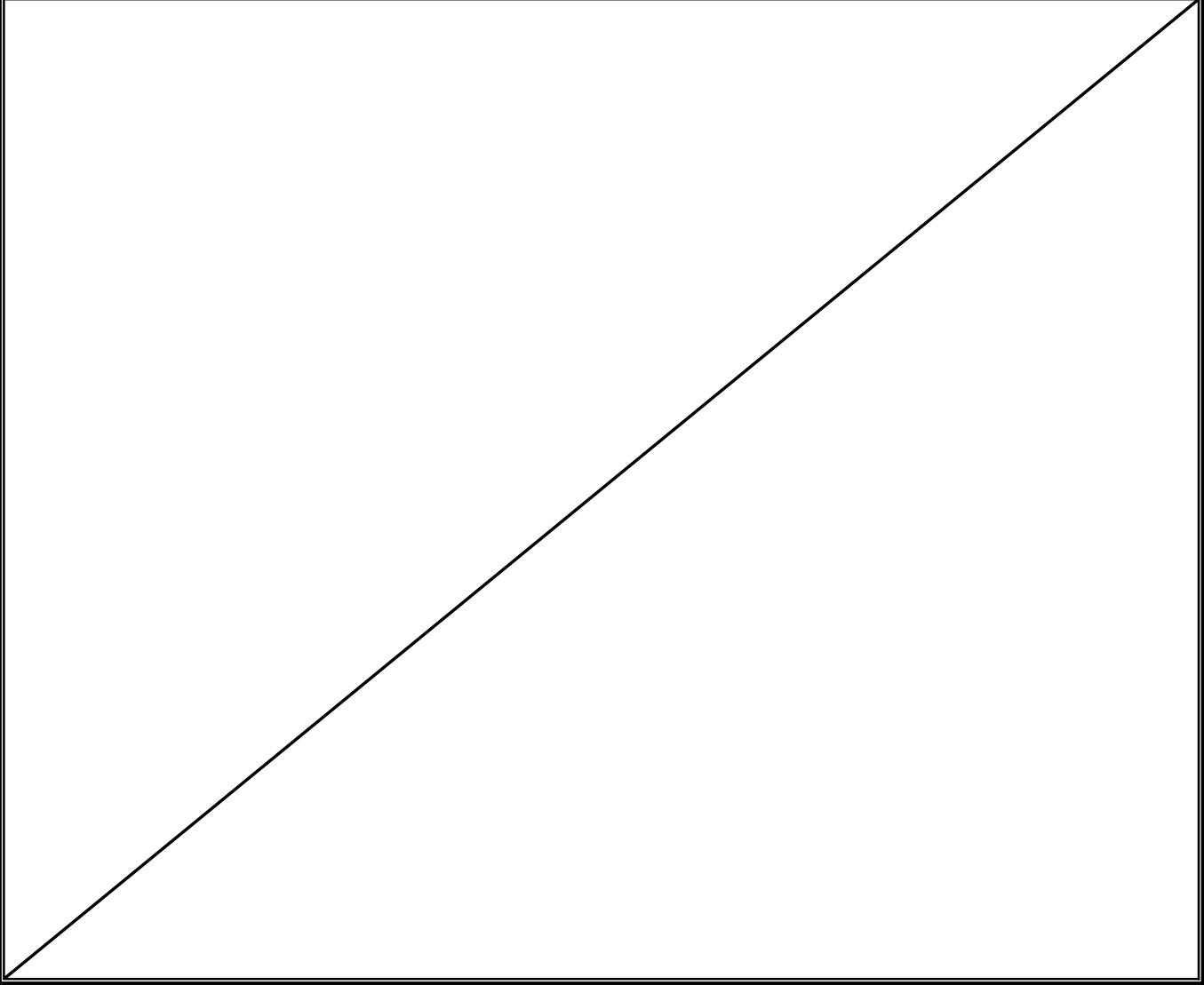
Description: Delineation activities near SS01

View: Northwest



## APPENDIX C

### Lithologic Soil Sampling Logs

 <b>ENSOLUM</b>							Sample Name: BH01	Date: 9/3/2025
							Site Name: PLU BS 07-25-31 Battery	
							Incident Number: nAPP2434831355	
							Job Number: 03C1558727	
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: JH		Method: Hand Auger	
Coordinates: 32.152144, -103.818945					Hole Diameter: 4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	14.7	N	BH01	0.5	0 0.5	CCHE	Caliche, tan, w/ poorly sorted gravel
D	<168	0	N	BH01A	1	0 0.5 1	CCHE	Sandy Silt with Gravel, Well graded silt with sand and limestone gravels (0.1-2.2 cm). Non-cohesive, non-plastic. No odor or staining.
Total Depth @ 1'								
								



## APPENDIX D

### Laboratory Analytical Reports & Chain of Custody Documentation



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

September 08, 2025

ASHLEY HOLMES  
ENSOLUM  
3122 NATIONAL PARKS HWY  
CARLSBAD, NM 88220

RE: PLU BS 07 - 25 - 31 BATTERY

Enclosed are the results of analyses for samples received by the laboratory on 09/04/25 13:40.

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 [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



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

**Analytical Results For:**

ENSLUM  
 ASHLEY HOLMES  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received:	09/04/2025	Sampling Date:	09/03/2025
Reported:	09/08/2025	Sampling Type:	Soil
Project Name:	PLU BS 07 - 25 - 31 BATTERY	Sampling Condition:	Cool & Intact
Project Number:	03C1558727	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.15216-103.81862		

**Sample ID: BH01 0.5' (H255504-01)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/05/2025	ND	1.76	87.8	2.00	2.22		
Toluene*	<0.050	0.050	09/05/2025	ND	1.83	91.5	2.00	2.38		
Ethylbenzene*	<0.050	0.050	09/05/2025	ND	1.84	92.0	2.00	2.04		
Total Xylenes*	<0.150	0.150	09/05/2025	ND	5.65	94.1	6.00	2.12		
Total BTEX	<0.300	0.300	09/05/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	09/05/2025	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/05/2025	ND	196	98.1	200	2.89		
DRO >C10-C28*	625	10.0	09/05/2025	ND	191	95.7	200	0.0334		
EXT DRO >C28-C36	99.2	10.0	09/05/2025	ND						

Surrogate: 1-Chlorooctane 104 % 44.4-145

Surrogate: 1-Chlorooctadecane 117 % 40.6-153

Cardinal Laboratories

\*=Accredited Analyte

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

Celey D. Keene, Lab Director/Quality Manager



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

**Analytical Results For:**

ENSLUM  
 ASHLEY HOLMES  
 3122 NATIONAL PARKS HWY  
 CARLSBAD NM, 88220  
 Fax To:

Received: 09/04/2025 Sampling Date: 09/03/2025  
 Reported: 09/08/2025 Sampling Type: Soil  
 Project Name: PLU BS 07 - 25 - 31 BATTERY Sampling Condition: Cool & Intact  
 Project Number: 03C1558727 Sample Received By: Alyssa Parras  
 Project Location: XTO 32.15216-103.81862

**Sample ID: BH01A 1' (H255504-02)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	09/05/2025	ND	1.76	87.8	2.00	2.22		
Toluene*	<0.050	0.050	09/05/2025	ND	1.83	91.5	2.00	2.38		
Ethylbenzene*	<0.050	0.050	09/05/2025	ND	1.84	92.0	2.00	2.04		
Total Xylenes*	<0.150	0.150	09/05/2025	ND	5.65	94.1	6.00	2.12		
Total BTEX	<0.300	0.300	09/05/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	09/05/2025	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	09/05/2025	ND	196	98.1	200	2.89		
DRO >C10-C28*	<10.0	10.0	09/05/2025	ND	191	95.7	200	0.0334		
EXT DRO >C28-C36	<10.0	10.0	09/05/2025	ND						

Surrogate: 1-Chlorooctane 102 % 44.4-145

Surrogate: 1-Chlorooctadecane 100 % 40.6-153

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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### Notes and Definitions

S-04 The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.

QR-03 The RPD value for the sample duplicate or MS/MSD was outside of QC acceptance limits due to matrix interference. QC batch accepted based on LCS and/or LCSD recovery and/or RPD values.

QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.

ND Analyte NOT DETECTED at or above the reporting limit

RPD Relative Percent Difference

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

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

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

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

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A handwritten signature in black ink, appearing to read "Celey D. Keene".

Celey D. Keene, Lab Director/Quality Manager



**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

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

† Cardinal cannot accept verbal changes. Please email changes to [celeste.kenney@nd.edu](mailto:celeste.kenney@nd.edu) before 11:59 p.m. on the due date.



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Jeremy Reich

Ensolum

601 N. Marienfeld St.

Suite 400

Midland, Texas 79701

Generated 9/17/2025 2:37:49 PM

## JOB DESCRIPTION

PLU BS 07 -25 -31

03C1558727

## JOB NUMBER

890-8808-1

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



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

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Laboratory Job ID: 890-8808-1  
SDG: 03C1558727

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## Definitions/Glossary

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

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

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

## Case Narrative

Client: Ensolum  
Project: PLU BS 07 -25 -31

Job ID: 890-8808-1

Job ID: 890-8808-1

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### Job Narrative 890-8808-1

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

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

### Receipt

The samples were received on 9/16/2025 3:06 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C.

### Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS 01 (890-8808-1), SS 03 (890-8808-2) and SS 04 (890-8808-3).

### GC VOA

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-119019/3-A). Evidence of matrix interferences is not obvious.

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

### HPLC/IC

Method 300\_ORGFM\_28D - Soluble: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-119076 and analytical batch 880-119124 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.

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

**Client Sample ID: SS 01**  
Date Collected: 09/16/25 09:37  
Date Received: 09/16/25 15:06  
Sample Depth: SURFACE

**Lab Sample ID: 890-8808-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
Toluene	<0.00200	U	0.00200	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg	09/16/25 21:10	09/17/25 01:51		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		94		70 - 130		09/16/25 21:10	09/17/25 01:51	1
1,4-Difluorobenzene (Surr)		104		70 - 130		09/16/25 21:10	09/17/25 01:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/17/25 01:51	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	95.9		49.7	mg/Kg			09/16/25 22:50	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	<49.7	U	49.7	mg/Kg	09/16/25 10:39	09/16/25 22:50		1
<b>Diesel Range Organics (Over C10-C28)</b>	<b>95.9</b>		49.7	mg/Kg	09/16/25 10:39	09/16/25 22:50		1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg	09/16/25 10:39	09/16/25 22:50		1
<b>Surrogate</b>								
1-Chlorooctane								1
o-Terphenyl								1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	209		10.1	mg/Kg			09/17/25 14:33	1

**Client Sample ID: SS 03**

Date Collected: 09/16/25 09:55  
Date Received: 09/16/25 15:06  
Sample Depth: SURFACE

**Lab Sample ID: 890-8808-2**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
Toluene	<0.00202	U	0.00202	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
o-Xylene	<0.00202	U	0.00202	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg	09/16/25 21:10	09/17/25 02:12		1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		92		70 - 130		09/16/25 21:10	09/17/25 02:12	1

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

**Client Sample ID: SS 03**  
Date Collected: 09/16/25 09:55  
Date Received: 09/16/25 15:06  
Sample Depth: SURFACE

**Lab Sample ID: 890-8808-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130	09/16/25 21:10	09/17/25 02:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			09/17/25 02:12	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/16/25 23:04	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	<49.9	U	49.9	mg/Kg		09/16/25 10:39	09/16/25 23:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/16/25 10:39	09/16/25 23:04	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/16/25 10:39	09/16/25 23:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130	09/16/25 10:39	09/16/25 23:04	1
o-Terphenyl	121		70 - 130	09/16/25 10:39	09/16/25 23:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	468		9.96	mg/Kg			09/17/25 14:40	1

**Client Sample ID: SS 04****Lab Sample ID: 890-8808-3**

Matrix: Solid

Date Collected: 09/16/25 09:49

Date Received: 09/16/25 15:06

Sample Depth: SURFACE

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/16/25 21:10	09/17/25 02:32	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/16/25 21:10	09/17/25 02:32	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/16/25 21:10	09/17/25 02:32	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/16/25 21:10	09/17/25 02:32	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/16/25 21:10	09/17/25 02:32	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/16/25 21:10	09/17/25 02:32	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/16/25 21:10	09/17/25 02:32	1
1,4-Difluorobenzene (Surr)	100		70 - 130	09/16/25 21:10	09/17/25 02:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			09/17/25 02:32	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			09/16/25 23:19	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
 SDG: 03C1558727

**Client Sample ID: SS 04**  
 Date Collected: 09/16/25 09:49  
 Date Received: 09/16/25 15:06  
 Sample Depth: SURFACE

**Lab Sample ID: 890-8808-3**  
 Matrix: Solid

**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	<49.6	U	49.6	mg/Kg		09/16/25 10:39	09/16/25 23:19	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		09/16/25 10:39	09/16/25 23:19	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		09/16/25 10:39	09/16/25 23:19	1
<b>Surrogate</b>								
1-Chlorooctane	115		70 - 130			09/16/25 10:39	09/16/25 23:19	1
<i>o</i> -Terphenyl	117		70 - 130			09/16/25 10:39	09/16/25 23:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		9.94	mg/Kg			09/17/25 14:48	1

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## Surrogate Summary

Client: Ensolum  
 Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
 SDG: 03C1558727

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)									
890-8805-A-1-G MS	Matrix Spike	106	100									
890-8805-A-1-H MSD	Matrix Spike Duplicate	105	103									
890-8808-1	SS 01	94	104									
890-8808-2	SS 03	92	103									
890-8808-3	SS 04	100	100									
LCS 880-119080/1-A	Lab Control Sample	107	99									
LCSD 880-119080/2-A	Lab Control Sample Dup	104	102									
MB 880-119009/5-A	Method Blank	91	114									
MB 880-119080/5-A	Method Blank	90	110									

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)									
890-8799-A-11-F MS	Matrix Spike	116	109									
890-8799-A-11-G MSD	Matrix Spike Duplicate	116	110									
890-8808-1	SS 01	116	122									
890-8808-2	SS 03	119	121									
890-8808-3	SS 04	115	117									
LCS 880-119019/2-A	Lab Control Sample	74	71									
LCSD 880-119019/3-A	Lab Control Sample Dup	72	68 S1-									
MB 880-119019/1-A	Method Blank	89	92									

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31Job ID: 890-8808-1  
SDG: 03C1558727

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

Lab Sample ID: MB 880-119009/5-A

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119009

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/25 10:07	09/16/25 11:48	1
Surrogate	MB		MB		Limits	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	91				70 - 130		09/16/25 10:07	09/16/25 11:48	1
1,4-Difluorobenzene (Surr)	114				70 - 130		09/16/25 10:07	09/16/25 11:48	1

Lab Sample ID: MB 880-119080/5-A

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119080

Analyte	MB		MB		Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier	RL						
Benzene	<0.00200	U	0.00200		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
Toluene	<0.00200	U	0.00200		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		09/16/25 21:10	09/16/25 23:26	1
Surrogate	MB		MB		Limits	D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
4-Bromofluorobenzene (Surr)	90				70 - 130		09/16/25 21:10	09/16/25 23:26	1
1,4-Difluorobenzene (Surr)	110				70 - 130		09/16/25 21:10	09/16/25 23:26	1

Lab Sample ID: LCS 880-119080/1-A

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119080

Analyte	Spike		LCS		Unit	D	%Rec		RPD
	Added	Result	Qualifier	Unit			%Rec	Limits	
Benzene	0.100	0.1080		mg/Kg			108	70 - 130	
Toluene	0.100	0.1094		mg/Kg			109	70 - 130	
Ethylbenzene	0.100	0.1140		mg/Kg			114	70 - 130	
m-Xylene & p-Xylene	0.200	0.2208		mg/Kg			110	70 - 130	
o-Xylene	0.100	0.1095		mg/Kg			110	70 - 130	
Surrogate	LCS		LCS		Limits	D	%Rec		RPD
	%Recovery	Qualifier					%Rec	Limits	
4-Bromofluorobenzene (Surr)	107				70 - 130				
1,4-Difluorobenzene (Surr)	99				70 - 130				

Lab Sample ID: LCSD 880-119080/2-A

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119080

Analyte	Spike		LCSD		Unit	D	%Rec		RPD
	Added	Result	Qualifier	Unit			%Rec	Limits	
Benzene	0.100	0.1143		mg/Kg			114	70 - 130	35

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

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

Lab Sample ID: LCSD 880-119080/2-A

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119080

Analyte	Spike Added	LCSD		Unit	D	%Rec		RPD	Limit
		Result	Qualifier			%Rec	Limits		
Toluene	0.100	0.1149		mg/Kg		115	70 - 130	5	35
Ethylbenzene	0.100	0.1168		mg/Kg		117	70 - 130	2	35
m-Xylene & p-Xylene	0.200	0.2283		mg/Kg		114	70 - 130	3	35
o-Xylene	0.100	0.1143		mg/Kg		114	70 - 130	4	35

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-8805-A-1-G MS

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 119080

Analyte	Sample		Spike Added	MS		Unit	D	%Rec	
	Result	Qualifier		Result	Qualifier			%Rec	Limits
Benzene	<0.00200	U	0.100	0.1000		mg/Kg		100	70 - 130
Toluene	<0.00200	U	0.100	0.1019		mg/Kg		102	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1031		mg/Kg		103	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2016		mg/Kg		101	70 - 130
o-Xylene	<0.00200	U	0.100	0.1005		mg/Kg		100	70 - 130

Surrogate	MS		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-8805-A-1-H MSD

Matrix: Solid

Analysis Batch: 118991

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 119080

Analyte	Sample		Spike Added	MSD		Unit	D	%Rec	
	Result	Qualifier		Result	Qualifier			%Rec	Limits
Benzene	<0.00200	U	0.100	0.1024		mg/Kg		102	70 - 130
Toluene	<0.00200	U	0.100	0.1020		mg/Kg		102	70 - 130
Ethylbenzene	<0.00200	U	0.100	0.1040		mg/Kg		104	70 - 130
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2045		mg/Kg		102	70 - 130
o-Xylene	<0.00200	U	0.100	0.1015		mg/Kg		101	70 - 130

Surrogate	MSD		Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	105		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-119019/1-A

Matrix: Solid

Analysis Batch: 119007

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119019

Analyte	MB		RL	Unit	D	%Rec	
	Result	Qualifier				%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/16/25 10:39	09/16/25 17:22

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31Job ID: 890-8808-1  
SDG: 03C1558727

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

Lab Sample ID: MB 880-119019/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119007

Prep Batch: 119019

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/16/25 10:39	09/16/25 17:22	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/16/25 10:39	09/16/25 17:22	1
Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	89							
o-Terphenyl	92							

Lab Sample ID: LCS 880-119019/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119007

Prep Batch: 119019

Analyte	MB	MB	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec	Limits
	Result	Qualifier									
Gasoline Range Organics (GRO)-C6-C10			1000	1001		mg/Kg		100	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1126		mg/Kg		113	70 - 130		
Surrogate	LCS	LCS	Limits	Prepared	Analyzed	Dil Fac					
1-Chlorooctane	74										
o-Terphenyl	71										

Lab Sample ID: LCSD 880-119019/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119007

Prep Batch: 119019

Analyte	MB	MB	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier									
Gasoline Range Organics (GRO)-C6-C10			1000	1031		mg/Kg		103	70 - 130	3	20
Diesel Range Organics (Over C10-C28)			1000	1151		mg/Kg		115	70 - 130	2	20
Surrogate	LCS	LCS	Limits	Prepared	Analyzed	Dil Fac					
1-Chlorooctane	72										
o-Terphenyl	68	S1-									

Lab Sample ID: 890-8799-A-11-F MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 119007

Prep Batch: 119019

Analyte	Sample	Sample	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier									
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	838.6		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.8	U	999	945.4		mg/Kg		93	70 - 130		
Surrogate	MS	MS	Limits	Prepared	Analyzed	Dil Fac					
1-Chlorooctane	116										
o-Terphenyl	109										

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

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

Lab Sample ID: 890-8799-A-11-G MSD

Matrix: Solid

Analysis Batch: 119007

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 119019

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	999	848.5		mg/Kg		85	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U	999	979.0		mg/Kg		96	3	20
<b>Surrogate</b>										
<b>MSD MSD</b>										
<b>%Recovery Qualifier Limits</b>										
1-Chlorooctane	116			70 - 130						
<i>o</i> -Terphenyl	110			70 - 130						

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119076/1-A

Matrix: Solid

Analysis Batch: 119124

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			09/17/25 11:08	1

Lab Sample ID: LCS 880-119076/2-A

Matrix: Solid

Analysis Batch: 119124

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	228.3		mg/Kg		91	90 - 110

Lab Sample ID: LCSD 880-119076/3-A

Matrix: Solid

Analysis Batch: 119124

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	RPD Limit	
Chloride	250	250.2		mg/Kg		100	90 - 110	9	20

Lab Sample ID: 880-62716-A-1-C MS

Matrix: Solid

Analysis Batch: 119124

Client Sample ID: Matrix Spike

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	112	F1	250	304.8	F1	mg/Kg		77	90 - 110

Lab Sample ID: 880-62716-A-1-D MSD

Matrix: Solid

Analysis Batch: 119124

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	RPD Limit
Chloride	112	F1	250	307.0	F1	mg/Kg		78	1	20

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31Job ID: 890-8808-1  
SDG: 03C1558727

## GC VOA

## Analysis Batch: 118991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	8021B	119080
890-8808-2	SS 03	Total/NA	Solid	8021B	119080
890-8808-3	SS 04	Total/NA	Solid	8021B	119080
MB 880-119009/5-A	Method Blank	Total/NA	Solid	8021B	119009
MB 880-119080/5-A	Method Blank	Total/NA	Solid	8021B	119080
LCS 880-119080/1-A	Lab Control Sample	Total/NA	Solid	8021B	119080
LCSD 880-119080/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119080
890-8805-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	119080
890-8805-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	119080

## Prep Batch: 119009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-119009/5-A	Method Blank	Total/NA	Solid	5035	10

## Prep Batch: 119080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	5035	12
890-8808-2	SS 03	Total/NA	Solid	5035	13
890-8808-3	SS 04	Total/NA	Solid	5035	14
MB 880-119080/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-119080/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-119080/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-8805-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-8805-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 119114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	Total BTEX	
890-8808-2	SS 03	Total/NA	Solid	Total BTEX	
890-8808-3	SS 04	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Analysis Batch: 119007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	8015B NM	119019
890-8808-2	SS 03	Total/NA	Solid	8015B NM	119019
890-8808-3	SS 04	Total/NA	Solid	8015B NM	119019
MB 880-119019/1-A	Method Blank	Total/NA	Solid	8015B NM	119019
LCS 880-119019/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119019
LCSD 880-119019/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119019
890-8799-A-11-F MS	Matrix Spike	Total/NA	Solid	8015B NM	119019
890-8799-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	119019

## Prep Batch: 119019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	8015NM Prep	
890-8808-2	SS 03	Total/NA	Solid	8015NM Prep	
890-8808-3	SS 04	Total/NA	Solid	8015NM Prep	
MB 880-119019/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119019/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

## GC Semi VOA (Continued)

## Prep Batch: 119019 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-119019/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8799-A-11-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-8799-A-11-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 119118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Total/NA	Solid	8015 NM	
890-8808-2	SS 03	Total/NA	Solid	8015 NM	
890-8808-3	SS 04	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 119076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Soluble	Solid	DI Leach	
890-8808-2	SS 03	Soluble	Solid	DI Leach	
890-8808-3	SS 04	Soluble	Solid	DI Leach	
MB 880-119076/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119076/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119076/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-62716-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-62716-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 119124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8808-1	SS 01	Soluble	Solid	300.0	119076
890-8808-2	SS 03	Soluble	Solid	300.0	119076
890-8808-3	SS 04	Soluble	Solid	300.0	119076
MB 880-119076/1-A	Method Blank	Soluble	Solid	300.0	119076
LCS 880-119076/2-A	Lab Control Sample	Soluble	Solid	300.0	119076
LCSD 880-119076/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119076
880-62716-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	119076
880-62716-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	119076

## Lab Chronicle

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

## Client Sample ID: SS 01

Date Collected: 09/16/25 09:37  
Date Received: 09/16/25 15:06

Lab Sample ID: 890-8808-1  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	119080	09/16/25 21:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118991	09/17/25 01:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119114	09/17/25 01:51	SA	EET MID
Total/NA	Analysis	8015 NM		1			119118	09/16/25 22:50	SA	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	119019	09/16/25 10:39	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119007	09/16/25 22:50	TKC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	119076	09/17/25 07:57	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119124	09/17/25 14:33	CS	EET MID

## Client Sample ID: SS 03

Date Collected: 09/16/25 09:55  
Date Received: 09/16/25 15:06

Lab Sample ID: 890-8808-2  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	119080	09/16/25 21:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118991	09/17/25 02:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119114	09/17/25 02:12	SA	EET MID
Total/NA	Analysis	8015 NM		1			119118	09/16/25 23:04	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	119019	09/16/25 10:39	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119007	09/16/25 23:04	TKC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119076	09/17/25 07:57	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119124	09/17/25 14:40	CS	EET MID

## Client Sample ID: SS 04

Date Collected: 09/16/25 09:49  
Date Received: 09/16/25 15:06

Lab Sample ID: 890-8808-3  
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	119080	09/16/25 21:10	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	118991	09/17/25 02:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			119114	09/17/25 02:32	SA	EET MID
Total/NA	Analysis	8015 NM		1			119118	09/16/25 23:19	SA	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	119019	09/16/25 10:39	FC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119007	09/16/25 23:19	TKC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	119076	09/17/25 07:57	SA	EET MID
Soluble	Analysis	300.0		1	10 mL	10 mL	119124	09/17/25 14:48	CS	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 BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

**Laboratory: Eurofins Midland**

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

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

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## Method Summary

Client: Ensolum  
Project/Site: PLU BS 07 -25 -31

Job ID: 890-8808-1  
SDG: 03C1558727

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

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## Sample Summary

Client: Ensolum

Job ID: 890-8808-1

Project/Site: PLU BS 07 -25 -31

SDG: 03C1558727

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8808-1	SS 01	Solid	09/16/25 09:37	09/16/25 15:06	SURFACE
890-8808-2	SS 03	Solid	09/16/25 09:55	09/16/25 15:06	SURFACE
890-8808-3	SS 04	Solid	09/16/25 09:49	09/16/25 15:06	SURFACE

1

2

3

4

5

6

7

8

9

10

11

12

13

14

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## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8808-1

SDG Number: 03C1558727

**Login Number: 8808****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: 890-8808-1

SDG Number: 03C1558727

**Login Number: 8808****List Source: Eurofins Midland****List Number: 2****List Creation: 09/16/25 08:53 PM****Creator: Rios, Minerva**

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



Environment Testing

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# ANALYTICAL REPORT

## PREPARED FOR

Attn: Jeremy Reich  
Ensolum  
601 N. Marienfeld St.  
Suite 400  
Midland, Texas 79701

Generated 9/29/2025 3:28:07 PM

## JOB DESCRIPTION

PLU BS 07-25-31  
03C1558727

## JOB NUMBER

890-8875-1

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

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Laboratory Job ID: 890-8875-1  
SDG: 03C1558727

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## Definitions/Glossary

Client: Ensolum

Job ID: 890-8875-1

Project/Site: PLU BS 07-25-31

SDG: 03C1558727

### Qualifiers

#### GC VOA

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

#### GC Semi VOA

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

#### HPLC/IC

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

### Glossary

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

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

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## Case Narrative

Client: Ensolum  
Project: PLU BS 07-25-31

Job ID: 890-8875-1

Job ID: 890-8875-1

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### Job Narrative 890-8875-1

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

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

### Receipt

The sample was received on 9/26/2025 1:47 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C.

### Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS02 (890-8875-1).

### GC VOA

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

### Diesel Range Organics

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-119903/2-A) and (LCSD 880-119903/3-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: (890-8875-A-1-B MS) and (890-8875-A-1-C MSD). Evidence of matrix interferences is not obvious.

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

### HPLC/IC

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

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## Client Sample Results

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

**Client Sample ID: SS02**  
Date Collected: 09/20/25 10:20  
Date Received: 09/26/25 13:47  
Sample Depth: 0.5

**Lab Sample ID: 890-8875-1**  
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/29/25 09:16	09/29/25 12:45	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		106		70 - 130		09/29/25 09:16	09/29/25 12:45	1
1,4-Difluorobenzene (Surr)		93		70 - 130		09/29/25 09:16	09/29/25 12:45	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/29/25 12:45	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			09/29/25 13:03	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		09/26/25 15:52	09/29/25 13:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/26/25 15:52	09/29/25 13:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/26/25 15:52	09/29/25 13:03	1
<b>Surrogate</b>								
1-Chlorooctane								1
o-Terphenyl								1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	127		9.96	mg/Kg			09/29/25 09:29	1

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## Surrogate Summary

Client: Ensolum  
 Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
 SDG: 03C1558727

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)									
890-8875-1	SS02	106	93									
890-8875-1 MS	SS02	104	105									
890-8875-1 MSD	SS02	98	100									
LCS 880-119952/1-A	Lab Control Sample	107	107									
LCSD 880-119952/2-A	Lab Control Sample Dup	107	107									
MB 880-119952/5-A	Method Blank	90	92									

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

## Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)									
890-8875-1	SS02	71	81									
890-8875-1 MS	SS02	121	138 S1+									
890-8875-1 MSD	SS02	119	132 S1+									
LCS 880-119903/2-A	Lab Control Sample	119	149 S1+									
LCSD 880-119903/3-A	Lab Control Sample Dup	118	142 S1+									
MB 880-119903/1-A	Method Blank	110	114									

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

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

Lab Sample ID: MB 880-119952/5-A

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 119952

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Benzene	<0.00200	U	0.00200		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
Toluene	<0.00200	U	0.00200		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	09/29/25 09:16		09/29/25 12:24		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	90		70 - 130			09/29/25 09:16		09/29/25 12:24		1
1,4-Difluorobenzene (Surr)	92		70 - 130			09/29/25 09:16		09/29/25 12:24		1

Lab Sample ID: LCS 880-119952/1-A

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119952

Analyte	Spikes	LCS	LCS	Result	Qualifier	Unit	D	%Rec	Limits	
	Added	Result	Qualifier							
Benzene	0.100	0.08946		mg/Kg			89	70 - 130		
Toluene	0.100	0.08803		mg/Kg			88	70 - 130		
Ethylbenzene	0.100	0.08979		mg/Kg			90	70 - 130		
m-Xylene & p-Xylene	0.200	0.1962		mg/Kg			98	70 - 130		
o-Xylene	0.100	0.09627		mg/Kg			96	70 - 130		
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	107		70 - 130							
1,4-Difluorobenzene (Surr)	107		70 - 130							

Lab Sample ID: LCSD 880-119952/2-A

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119952

Analyte	Spikes	LCSD	LCSD	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier								
Benzene	0.100	0.07918		mg/Kg			79	70 - 130		12	35
Toluene	0.100	0.07450		mg/Kg			75	70 - 130		17	35
Ethylbenzene	0.100	0.07436		mg/Kg			74	70 - 130		19	35
m-Xylene & p-Xylene	0.200	0.1615		mg/Kg			81	70 - 130		19	35
o-Xylene	0.100	0.07971		mg/Kg			80	70 - 130		19	35
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac			
	Result	Qualifier									
4-Bromofluorobenzene (Surr)	107		70 - 130								
1,4-Difluorobenzene (Surr)	107		70 - 130								

Lab Sample ID: 890-8875-1 MS

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: SS02

Prep Type: Total/NA

Prep Batch: 119952

Analyte	Sample	Sample	Spikes	MS	MS	Result	Qualifier	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00201	U	0.100	0.09347		mg/Kg			93	70 - 130	
Toluene	<0.00201	U	0.100	0.09308		mg/Kg			93	70 - 130	

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

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

Lab Sample ID: 890-8875-1 MS

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: SS02  
Prep Type: Total/NA  
Prep Batch: 119952

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00201	U	0.100	0.09188		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1997		mg/Kg		100	70 - 130
o-Xylene	<0.00201	U	0.100	0.09747		mg/Kg		97	70 - 130

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	104				70 - 130
1,4-Difluorobenzene (Surr)	105				70 - 130

Lab Sample ID: 890-8875-1 MSD

Matrix: Solid

Analysis Batch: 119948

Client Sample ID: SS02  
Prep Type: Total/NA  
Prep Batch: 119952

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00201	U	0.100	0.09705		mg/Kg		97	70 - 130
Toluene	<0.00201	U	0.100	0.09308		mg/Kg		93	70 - 130
Ethylbenzene	<0.00201	U	0.100	0.09022		mg/Kg		90	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1936		mg/Kg		97	70 - 130
o-Xylene	<0.00201	U	0.100	0.09491		mg/Kg		95	70 - 130

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	98				70 - 130
1,4-Difluorobenzene (Surr)	100				70 - 130

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

Lab Sample ID: MB 880-119903/1-A

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: Method Blank  
Prep Type: Total/NA  
Prep Batch: 119903

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/26/25 15:52	09/29/25 10:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/26/25 15:52	09/29/25 10:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/26/25 15:52	09/29/25 10:34	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Recovery	Qualifier						
1-Chlorooctane	110				70 - 130	09/26/25 15:52	09/29/25 10:34	1
o-Terphenyl	114				70 - 130	09/26/25 15:52	09/29/25 10:34	1

Lab Sample ID: LCS 880-119903/2-A

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 119903

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1058		mg/Kg		106	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1013		mg/Kg		101	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

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

Lab Sample ID: LCS 880-119903/2-A

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 119903

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
<i>o</i> -Terphenyl	149	S1+	70 - 130

Lab Sample ID: LCSD 880-119903/3-A

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 119903

Analyte		Spike	LCSD	LCSD			%Rec	RPD
		Added	Result	Qualifier	Unit	D	%Rec	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	1010		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)		1000	981.6		mg/Kg		98	70 - 130

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	118		70 - 130
<i>o</i> -Terphenyl	142	S1+	70 - 130

Lab Sample ID: 890-8875-1 MS

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: SS02

Prep Type: Total/NA

Prep Batch: 119903

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	902.1		mg/Kg		90
Diesel Range Organics (Over C10-C28)	<50.0	U	999	870.9		mg/Kg		87

Surrogate	MS	MS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
<i>o</i> -Terphenyl	138	S1+	70 - 130

Lab Sample ID: 890-8875-1 MSD

Matrix: Solid

Analysis Batch: 119970

Client Sample ID: SS02

Prep Type: Total/NA

Prep Batch: 119903

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	916.8		mg/Kg		92
Diesel Range Organics (Over C10-C28)	<50.0	U	999	861.5		mg/Kg		86

Surrogate	MSD	MSD	
	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
<i>o</i> -Terphenyl	132	S1+	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-119940/1-A

Matrix: Solid

Analysis Batch: 119957

Client Sample ID: Method Blank  
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			09/29/25 09:14	1

Lab Sample ID: LCS 880-119940/2-A

Matrix: Solid

Analysis Batch: 119957

Client Sample ID: Lab Control Sample  
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	254.8		mg/Kg		102	90 - 110

Lab Sample ID: LCSD 880-119940/3-A

Matrix: Solid

Analysis Batch: 119957

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	RPD	Limit
Chloride	250	256.1		mg/Kg		102	90 - 110	1 20

Lab Sample ID: 890-8875-1 MS

Matrix: Solid

Analysis Batch: 119957

Client Sample ID: SS02  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Chloride	127		249	372.0		mg/Kg		98	90 - 110

Lab Sample ID: 890-8875-1 MSD

Matrix: Solid

Analysis Batch: 119957

Client Sample ID: SS02  
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	RPD	Limit
Chloride	127		249	372.8		mg/Kg		99	90 - 110	0 20

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: PLU BS 07-25-31Job ID: 890-8875-1  
SDG: 03C1558727

## GC VOA

## Analysis Batch: 119948

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	8021B	119952
MB 880-119952/5-A	Method Blank	Total/NA	Solid	8021B	119952
LCS 880-119952/1-A	Lab Control Sample	Total/NA	Solid	8021B	119952
LCSD 880-119952/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	119952
890-8875-1 MS	SS02	Total/NA	Solid	8021B	119952
890-8875-1 MSD	SS02	Total/NA	Solid	8021B	119952

## Prep Batch: 119952

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	5035	9
MB 880-119952/5-A	Method Blank	Total/NA	Solid	5035	10
LCS 880-119952/1-A	Lab Control Sample	Total/NA	Solid	5035	11
LCSD 880-119952/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	12
890-8875-1 MS	SS02	Total/NA	Solid	5035	13
890-8875-1 MSD	SS02	Total/NA	Solid	5035	14

## Analysis Batch: 120020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 119903

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	8015NM Prep	
MB 880-119903/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-119903/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-119903/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-8875-1 MS	SS02	Total/NA	Solid	8015NM Prep	
890-8875-1 MSD	SS02	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 119970

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	8015B NM	119903
MB 880-119903/1-A	Method Blank	Total/NA	Solid	8015B NM	119903
LCS 880-119903/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	119903
LCSD 880-119903/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	119903
890-8875-1 MS	SS02	Total/NA	Solid	8015B NM	119903
890-8875-1 MSD	SS02	Total/NA	Solid	8015B NM	119903

## Analysis Batch: 120032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 119940

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Soluble	Solid	DI Leach	
MB 880-119940/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-119940/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-119940/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

**HPLC/IC (Continued)****Leach Batch: 119940 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1 MS	SS02	Soluble	Solid	DI Leach	
890-8875-1 MSD	SS02	Soluble	Solid	DI Leach	

**Analysis Batch: 119957**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-8875-1	SS02	Soluble	Solid	300.0	119940
MB 880-119940/1-A	Method Blank	Soluble	Solid	300.0	119940
LCS 880-119940/2-A	Lab Control Sample	Soluble	Solid	300.0	119940
LCSD 880-119940/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	119940
890-8875-1 MS	SS02	Soluble	Solid	300.0	119940
890-8875-1 MSD	SS02	Soluble	Solid	300.0	119940

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Eurofins Carlsbad

**Lab Chronicle**

Client: Ensolum  
 Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
 SDG: 03C1558727

**Client Sample ID: SS02**

Date Collected: 09/20/25 10:20

Date Received: 09/26/25 13:47

**Lab Sample ID: 890-8875-1**

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	119952	09/29/25 09:16	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	119948	09/29/25 12:45	EL	EET MID
Total/NA	Analysis	Total BTEX		1			120020	09/29/25 12:45	SA	EET MID
Total/NA	Analysis	8015 NM		1			120032	09/29/25 13:03	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	119903	09/26/25 15:52	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	119970	09/29/25 13:03	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	119940	09/29/25 08:12	SI	EET MID
Soluble	Analysis	300.0		1			119957	09/29/25 09:29	CS	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

Job ID: 890-8875-1

Project/Site: PLU BS 07-25-31

SDG: 03C1558727

**Laboratory: Eurofins Midland**

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400	06-30-26

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8015 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX



Eurofins Carlsbad

## Method Summary

Client: Ensolum  
Project/Site: PLU BS 07-25-31

Job ID: 890-8875-1  
SDG: 03C1558727

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 BS 07-25-31

Job ID: 890-8875-1

SDG: 03C1558727

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-8875-1	SS02	Solid	09/20/25 10:20	09/26/25 13:47	0.5

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Eurofins Carlsbad



## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8875-1

SDG Number: 03C1558727

**Login Number: 8875****List Source: Eurofins Carlsbad****List Number: 1****Creator: Bruns, Shannon****Question****Answer****Comment**

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

True

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 &lt;6mm (1/4").

N/A

## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-8875-1

SDG Number: 03C1558727

**Login Number: 8875****List Source: Eurofins Midland****List Number: 2****List Creation: 09/29/25 07:53 AM****Creator: Laing, Edmundo**

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



## APPENDIX E

### Spill Volume Calculation

<b>Location:</b>	<b>PLU BS 07-25-31</b>	
<b>Spill Date:</b>	<b>12/12/2024</b>	
<b>Area 1</b>		
Approximate Area =	3561.00	sq. ft.
Average Saturation (or depth) of spill =	1.00	inches
Average Porosity Factor =	0.25	
<b>VOLUME OF LEAK</b>		
Total Crude Oil =	10.00	bbls
Total Produced Water =		bbls
<b>TOTAL VOLUME OF LEAK</b>		
Total Crude Oil =	10.00	bbls
Total Produced Water =		bbls
<b>TOTAL VOLUME RECOVERED</b>		
Total Crude Oil =	10.00	bbls
Total Produced Water =		bbls

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

QUESTIONS

Action 411659

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 411659
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2434831355
Incident Name	NAPP2434831355 PLU BS 07-25-31 BATTERY @ 0
Incident Type	Oil Release
Incident Status	Initial C-141 Received

**Location of Release Source**

*Please answer all the questions in this group.*

Site Name	PLU BS 07-25-31 Battery
Date Release Discovered	12/12/2024
Surface Owner	Federal

**Incident Details**

*Please answer all the questions in this group.*

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

**Nature and Volume of Release**

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

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pump   Crude Oil   Released: 10 BBL   Recovered: 10 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Full impermeable containment

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QUESTIONS, Page 2

Action 411659

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 411659
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	No, according to supplied volumes this does not appear to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	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.*

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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

I hereby agree and sign off to the above statement	Name: Colton Brown Title: Environmental Advisor Email: colton.s.brown@exxonmobil.com Date: 12/13/2024
--	--

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QUESTIONS, Page 3

Action 411659

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 411659
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

**Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	<i>Not answered.</i>
What method was used to determine the depth to ground water	<i>Not answered.</i>
Did this release impact groundwater or surface water	<i>Not answered.</i>
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	<i>Not answered.</i>
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	<i>Not answered.</i>
An occupied permanent residence, school, hospital, institution, or church	<i>Not answered.</i>
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	<i>Not answered.</i>
Any other fresh water well or spring	<i>Not answered.</i>
Incorporated municipal boundaries or a defined municipal fresh water well field	<i>Not answered.</i>
A wetland	<i>Not answered.</i>
A subsurface mine	<i>Not answered.</i>
An (non-karst) unstable area	<i>Not answered.</i>
Categorize the risk of this well / site being in a karst geology	<i>Not answered.</i>
A 100-year floodplain	<i>Not answered.</i>
Did the release impact areas not on an exploration, development, production, or storage site	<i>Not answered.</i>

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	<b>No</b>
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

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CONDITIONS

Action 411659

**CONDITIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 411659
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	None	12/16/2024

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**Santa Fe, NM 87505**

QUESTIONS

Action 528984

**QUESTIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 528984
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2434831355
Incident Name	NAPP2434831355 PLU BS 07-25-31 BATTERY @ C-07-25S-31E
Incident Type	Oil Release
Incident Status	Deferral Request Received

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

Site Name	PLU BS 07-25-31 Battery
Date Release Discovered	12/12/2024
Surface Owner	Federal

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

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

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

Crude Oil Released (bbls) Details	Cause: Equipment Failure   Pump   Crude Oil   Released: 10 BBL   Recovered: 10 BBL   Lost: 0 BBL.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Full impermeable containment

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QUESTIONS, Page 2

Action 528984

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  528984
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	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	<i>Unavailable.</i>

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

<b>Initial Response</b>	
<i>The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.</i>	
The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 11/24/2025
--	---

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QUESTIONS, Page 3

**State of New Mexico**  
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Action 528984

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  528984
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS****Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between $\frac{1}{2}$ and 1 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between $\frac{1}{2}$ and 1 (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 1000 (ft.) and $\frac{1}{2}$ (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	

Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	468
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	724
GRO+DRO (EPA SW-846 Method 8015M)	625
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	12/12/2024
On what date will (or did) the final sampling or liner inspection occur	09/03/2025
On what date will (or was) the remediation complete(d)	09/20/2025
What is the estimated surface area (in square feet) that will be reclaimed	3543
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	3543
What is the estimated volume (in cubic yards) that will be remediated	0

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

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

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QUESTIONS, Page 4

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

Action 528984

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 528984
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

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

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

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

*(Select all answers below that apply.)*

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	<i>Not answered.</i>
(In Situ) Soil Vapor Extraction	<i>Not answered.</i>
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	<i>Not answered.</i>
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	<i>Not answered.</i>
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	<i>Not answered.</i>
Ground Water Abatement pursuant to 19.15.30 NMAC	<i>Not answered.</i>
OTHER (Non-listed remedial process)	Yes
Other Non-listed Remedial Process. Please specify	A 48-hour advanced notice of the liner inspection was submitted to the NMOCD on August 21, 2025. The lined containment was cleaned of all debris and power washed and a liner integrity inspection was conducted by Ensolum personnel on August 26, 2025. The lined containment was inspected, and it was determined to contain a small hole. Delineation to determine the extent of the release was warranted.

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 11/24/2025
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*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 5

Action 528984

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  528984
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**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	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Is the remaining contamination in areas immediately under or around production equipment where remediation could cause a major facility deconstruction	Yes
Please list or describe the production equipment and how (re)moving the equipment would cause major facility deconstruction	Lined containment housing separators and production equipment.
What is the remaining surface area (in square feet) that will still need to be remediated if a deferral is granted	3543
What is the remaining volume (in cubic yards) that will still need to be remediated if a deferral is granted	131

*Per Paragraph (2) of Subsection C of 19.15.29.12 NMAC if contamination is located in areas immediately under or around production equipment such as production tanks, wellheads and pipelines where remediation could cause a major facility deconstruction, the remediation, restoration and reclamation may be deferred with division written approval until the equipment is removed during other operations, or when the well or facility is plugged or abandoned, whichever comes first.*

Enter the facility ID (f#) on which this deferral should be granted	fAPP2126356304 PLU BIG SINKS 07 25 31 USA BATT
Enter the well API (30-) on which this deferral should be granted	Not answered.
Contamination does not cause an imminent risk to human health, the environment, or groundwater	True

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 11/24/2025
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QUESTIONS, Page 6

Action 528984

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  528984
	Action Type:  [C-141] Deferral Request C-141 (C-141-v-Deferral)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>505014</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>09/16/2025</b>
What was the (estimated) number of samples that were to be gathered	<b>7</b>
What was the sampling surface area in square feet	<b>1400</b>

**Remediation Closure Request**

*Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.*

Requesting a remediation closure approval with this submission	<b>No</b>
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CONDITIONS

Action 528984

**CONDITIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 528984
	Action Type: [C-141] Deferral Request C-141 (C-141-v-Deferral)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	XTO's deferral requests to defer the remaining residual impacts under the tank battery containment liner until final reclamation of the well pad or major construction, whichever comes first. The area requested for deferral is identified on the site map as "BH01". The area has been delineated and documented in the report. At this time, OCD approves the request. At this time, OCD approves this request. The Deferral Request and C-141 will be accepted for record and placed in the incident file. The release will remain open in OCD database files and reflect an open environmental issue.	12/17/2025