



January 16, 2026

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

**Re: Remediation Work Plan  
Dog Town Draw PW Booster  
Incident Number nAPP2529655909  
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Remediation Work Plan (Work Plan)* to document assessment, delineation, and soil sampling activities for a produced water release into a lined containment and onto the adjacent right-of-way (ROW) and pasture areas associated with Dog Town Draw PW Booster (Site) also referred to as the 1<sup>st</sup> Spine Booster. The following *Work Plan* describes delineation and soil sampling activities and proposes to excavate identified impacted soil.

## **SITE DESCRIPTION AND RELEASE SUMMARY**

The Site was originally reported in Unit N, Section 02, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.1657394°, -103.8463763°). After review of internal documents, it was confirmed to be located in Unit A (L1), Section 02, Township 25 South, Range 30 East and is associated with oil and gas exploration and production operations on State Trust Land managed by the New Mexico State Land Office (NMSLO) under Lease Number B106790001.

On October 22, 2025, pump failure resulted in the release of approximately 41 barrels (bbls) of produced water into a lined containment and overflowed onto the adjacent ROW and pasture areas. A vacuum truck was immediately dispatched and recovered 40 bbls of released fluids. XTO submitted a Notification of Release (NOR) and an Initial C-141 Application (C-141) on October 23, 2025, to the New Mexico Oil Conservation Division (NMOCD). The release was assigned Incident Number nAPP2529655909.

## **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. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest groundwater data is from a New Mexico Office of the State Engineer (NMOSE) well, permitted as C-03716, located approximately 0.21 miles southeast

of the Site. In March 2014, the well was advanced to a depth of 600 bgs with groundwater first encountered at 442 feet bgs. The Well Record & Log for C-03716 is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 9,808 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 unstable geology (low potential karst designation area), and no other sensitive receptors were identified.

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

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH)-gasoline range organics (GRO) and TPH-diesel range organics (DRO): 1,000 mg/kg
- TPH: 2,500 mg/kg
- Chloride: 20,000 mg/kg

A reclamation requirement of 600 mg/kg chloride and 100 mg/kg total TPH applies to the top 4 feet of ROW and pasture areas that were impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

## NMSLO CULTURAL RESOURCES AND BIOLOGICAL REVIEW

### Cultural Properties Protection

The release was identified in the pasture and as a result, the release location was assessed for determination of whether the release encroached into undisturbed areas to comply with the Cultural Properties Protection Rule (CPP) prior to disturbing the surface with mechanical equipment. An Archaeological Records Management System (ARMS) review was performed for the release extent prior to excavation, and it was determined the potential disturbance area was previously surveyed. No cultural resources were identified within and/or around the release extent requiring remediation efforts. The NMSLO Cultural Resources Cover Sheet is attached in Appendix B.

### Biological Review

Ensolum personnel conducted a desktop review to establish if the Site is within an area of possibly threatened, endangered, and/or sensitive wildlife and plant species, environmentally sensitive areas, surface waters, and/or sensitive soils.

- A review of the U.S. Fish and Wildlife Services Information for Planning and Consultation (IPaC) resources indicated there are no critical wildlife habitats at the Site, but potential habitats of the Piping Plover, Texas Hornshell Clam, and Monarch Butterfly might exist. A review of the Bureau of Land Management (BLM) New Mexico Plant Wildlife Habitat maps indicated potential habitats for Scheer's beehive cactus near the Site. Threatened and endangered plant species are

potentially present in the area surrounding the Site; however, no protected species were observed during remediation activities.

- The Site is located within an area of possible range of the Lesser Prairie Chicken habitat based on a review of NMSLO Candidate Conservation Agreement with Assurances (CCAA) map.
  - From March 1<sup>st</sup> through June 15<sup>th</sup>, no remediation activities will occur between the hours of 3:00 am to 9:00 am to protect any Lesser Prairie Chickens within the area.
- No environmentally sensitive receptors were located near the Site, as determined by the Site Characterization.
- The Natural Resources Conservation Service (NRCS) Web Soil Survey classifies the soil type at the Site as Berino complex, 0 to 3 percent slopes, eroded. The Berino complex is not considered a sensitive soil per the SLO guidelines.

## SITE ASSESSMENT AND DELINEATION ACTIVITIES

On November 7, 2025, Ensolum personnel visited the Site to conduct delineation activities. Three boreholes, BH01 through BH03, were advanced via hand auger to investigate the vertical extent of the release. The boreholes were advanced to a maximum terminal depth of 3 feet bgs. Discrete soil samples were collected from the boreholes at depths ranging from 0.5 feet to 3 feet bgs. In addition, six delineation soil samples (SS01 through SS06) were collected outside the release extent from the ground surface to laterally delineate the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations for the boreholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The release extent and 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 D.

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 Eurofins Laboratory (Eurofins) in Carlsbad, New Mexico, for analysis of the following contaminants of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

## LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples SS01 through SS06 indicated all COC concentrations were compliant with Closure Criteria and reclamation requirements, successfully defining the lateral extent of the release. Laboratory analytical results for delineation soil samples collected from boreholes BH01 (0.5 ft bgs), BH02 (0.5 ft bgs), and BH03 (0.5 ft bgs and 1 ft bgs) indicated chloride concentrations exceeded the reclamation requirement; however, the chloride concentrations in the delineation soil samples collected from boreholes BH01 (1 ft bgs), BH02 (3 ft bgs), and BH03 (3 ft bgs) were compliant with the reclamation requirement. Laboratory analytical results are summarized in Table 1, and the complete laboratory analytical reports are included as Appendix E.

## PROPOSED REMEDIATION WORK PLAN

The delineation soil sampling results indicate soil containing elevated chloride concentrations exist across an approximate 1,359 square foot area and extends to depths ranging from 1-foot to 3 feet bgs. As such, XTO proposes completing the following remediation activities:

- Excavation of chloride impacted soil to depths ranging from 1-foot to 3 feet bgs. Excavation will proceed until confirmation soil samples confirm all COC concentrations are compliant with the Closure Criteria and reclamation requirements, where applicable.
- Confirmation composite soil samples will be collected from the floor and sidewalls at a sampling frequency representing no more than 200 square feet.
- An estimated 150 cubic yards of impacted soil will be excavated and disposed of at a New Mexico approved disposal facility.
- The excavation will be backfilled with locally procured material and recontoured to match pre-existing conditions. Pasture areas will be reseeded with the recommended NMSLO seed mix.

XTO believed this *Work Plan* is protective of human health, the environment, and groundwater. As such, XTO requests approval of this *Work Plan* by NMOCD. XTO will complete the excavation and soil sampling activities within 90 days of the date of approval of this *Work Plan* by the NMOCD or within 90 days of when XTO production operations is discharged from the Site, whichever comes first.

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**



Tracy Hillard  
Project Engineer



Tacoma Morrissey  
Associate Principal

cc: Robert Woodall, XTO  
Richard Kotzur, XTO  
New Mexico State Land Office

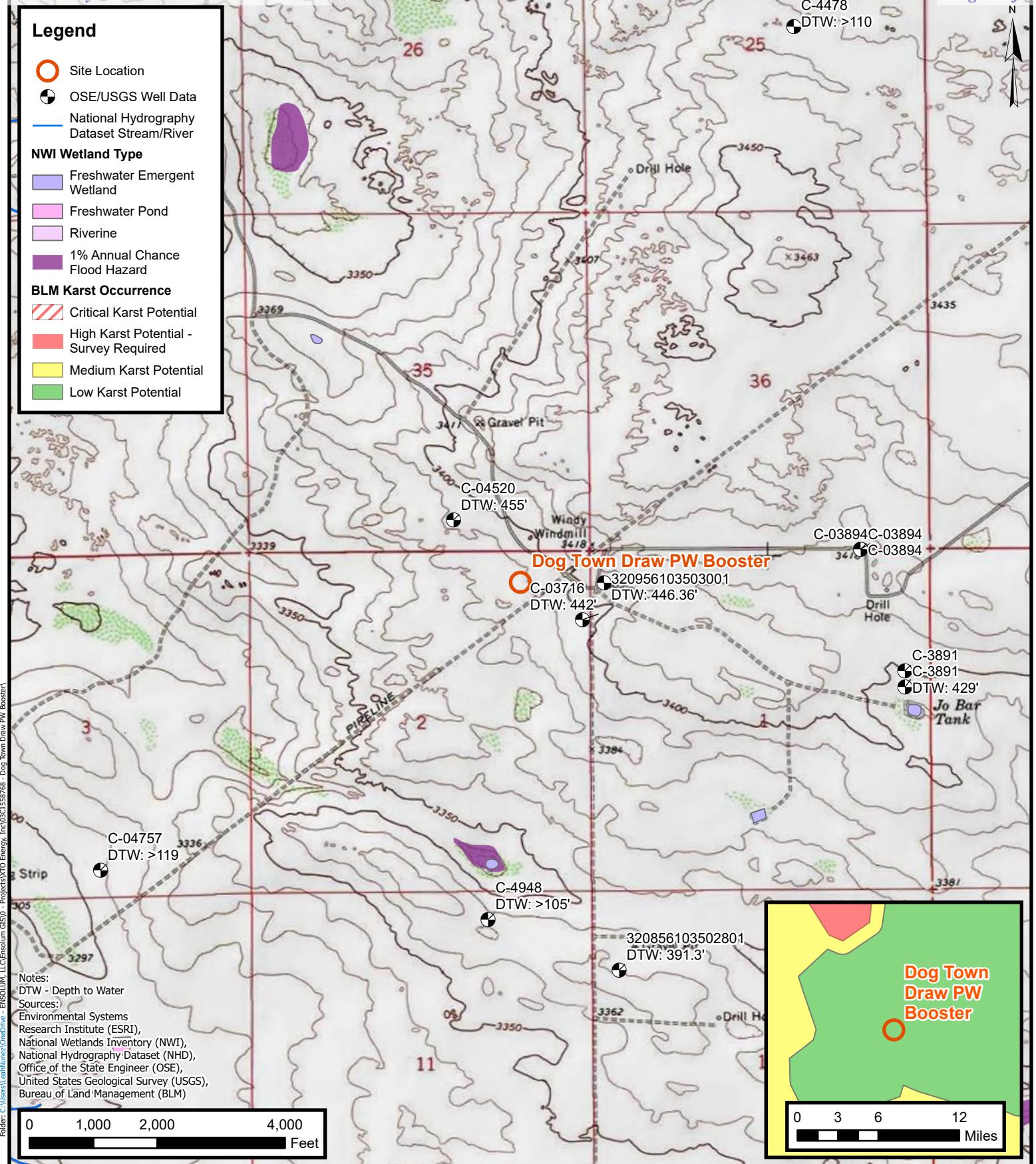
#### Appendices:

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



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## FIGURES



Notes:  
DTW - Depth to Water

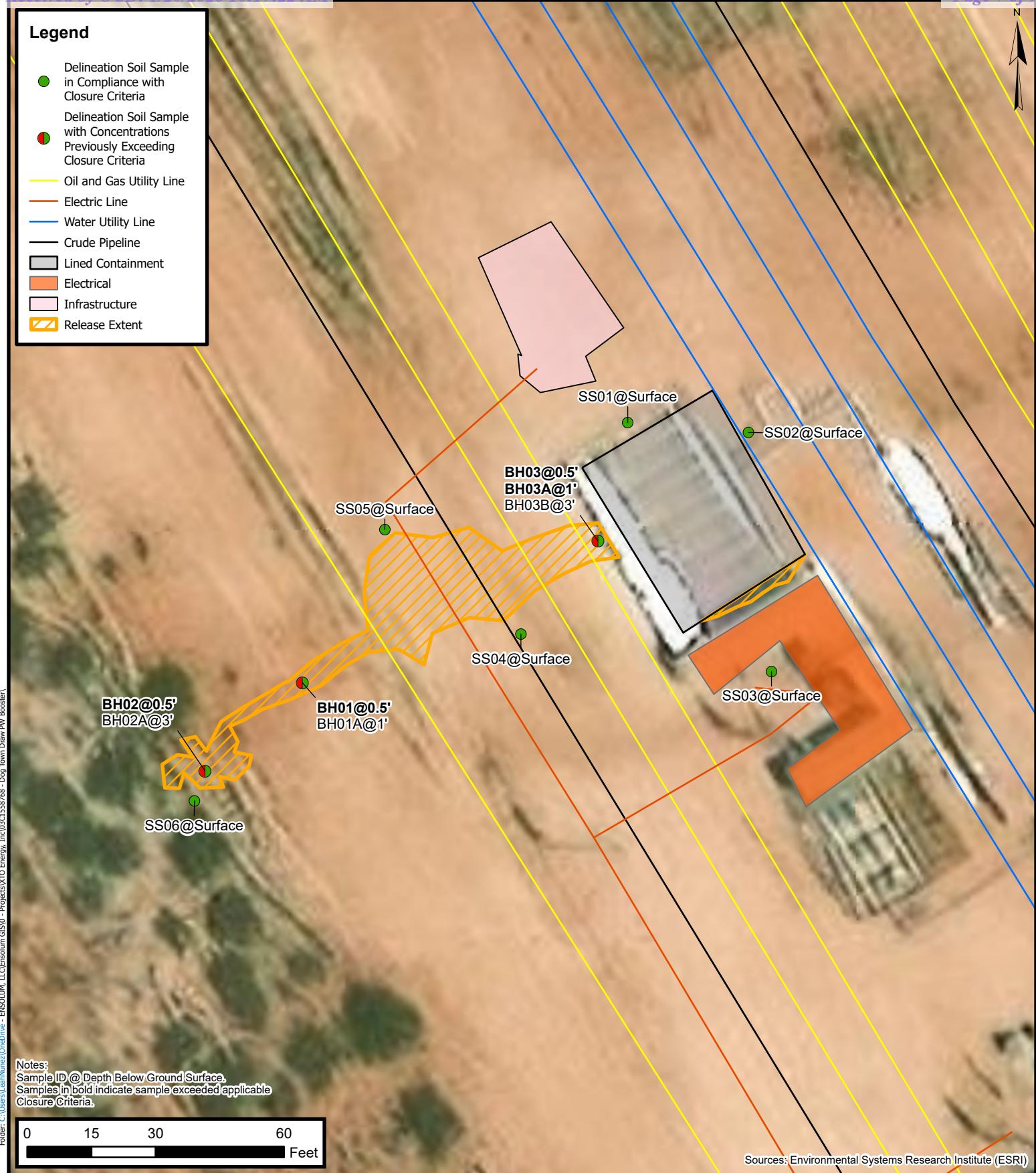
Sources:  
Environmental Systems  
Research Institute (ESRI),  
National Wetlands Inventory (NWI),  
National Hydrography Dataset (NHD),  
Office of the State Engineer (OSE),  
United States Geological Survey (USGS),  
Bureau of Land Management (BLM)

0 1,000 2,000 4,000  
[REDACTED] Feet

## Site Receptor Map

XTO Energy, Inc  
Dog Town Draw PW Booster  
Incident Number: nAPP2529655909  
Unit A (L1), Section 02, T 25S, R 30E  
Eddy County, New Mexico

# FIGURE 1





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## TABLES



**TABLE 1**  
**SOIL SAMPLE ANALYTICAL RESULTS**  
**Dog Town Draw PW Booster**  
**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)
<b>NMOCD Table I Closure Criteria (NMAC 19.15.29)</b>			<b>10</b>	<b>50</b>	<b>NE</b>	<b>NE</b>	<b>NE</b>	<b>1,000</b>	<b>2,500</b>	<b>20,000</b>
<b>Delineation Soil Samples</b>										
SS01	11/07/2025	Surface	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	162
SS02	11/07/2025	Surface	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	<9.96
SS03	11/07/2025	Surface	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	17.3
SS04	11/07/2025	Surface	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	142
SS05	11/07/2025	Surface	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<9.92
SS06	11/07/2025	Surface	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<9.90
BH01	11/07/2025	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	<b>2,580</b>
BH01A	11/07/2025	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	166
BH02	11/07/2025	0.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	<b>1,420</b>
BH02A	11/07/2025	3	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	122
BH03	11/07/2025	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	<b>923</b>
BH03A	11/07/2025	1	<0.00201	<0.00402	<50.1	<50.1	<50.1	<50.1	<50.1	<b>3,820</b>
BH03B	11/07/2025	3	<0.00198	<0.00396	<49.7	<49.7	<49.7	<49.7	<49.7	224

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



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## APPENDIX A

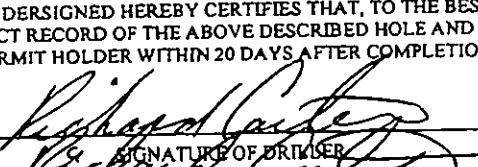
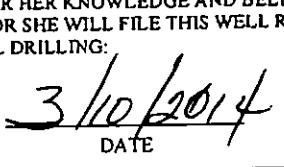
### Referenced Well Records

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

FOR OSE INTERNAL USE		WELL RECORD & LOG (Version 69/08)	
FILE NUMBER	C-3716	POD NUMBER	TRN NUMBER
LOCATION	25S, 30E. 02	8-2-4	PAGE 1 OF 2

5. SEAL AND PUMP	TYPE OF PUMP:		<input type="checkbox"/> SUBMERSIBLE	<input type="checkbox"/> JET	<input checked="" type="checkbox"/> NO PUMP - WELL NOT EQUIPPED	2	1
			<input type="checkbox"/> TURBINE	<input type="checkbox"/> CYLINDER	<input type="checkbox"/> OTHER - SPECIFY:		
6. GEOLOGIC LOG OF WELL	DEPTH (FT)		BORE HOLE DIA. (IN)	MATERIAL TYPE AND SIZE		AMOUNT (CUBIC FT)	METHOD OF PLACEMENT
	FROM	TO	8 3/4	Cement & Water		252	TREMIE
	0	425	8 3/4	Silica Sand		73.5	TREMIE
DEPTH (FT)	THICKNESS (FT)		COLOR AND TYPE OF MATERIAL ENCOUNTERED (INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES)			WATER BEARING?	
FROM	TO						
0	2	2			white Caliche		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
2	4	2			Red Sand		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
4	18	14			white Caliche		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
18	120	102			Red Sand		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
120	168	48			Red Clay		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
168	263	9.5			Red Sandstone		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
263	266	3			Red Clay		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
266	406	146			Red sandstone		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
406	416	10			Red Clay		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
416	442	26			gray Clay		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
442	600				Red sandstone		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
ATTACH ADDITIONAL PAGES AS NEEDED TO FULLY DESCRIBE THE GEOLOGIC LOG OF THE WELL							
7. TEST & ADDITIONAL INFO	WELL TEST	METHOD: <input type="checkbox"/> BAILER <input type="checkbox"/> PUMP <input checked="" type="checkbox"/> AIR LIFT <input type="checkbox"/> OTHER - SPECIFY:					
		TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
ADDITIONAL STATEMENTS OR EXPLANATIONS:							
8. 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:						
 SIGNATURE OF DRILLER				 DATE			

FOR OSE INTERNAL USE		WELL RECORD & LOG (VERSION 6.0.0)	
FILE NUMBER	C-3714	POD NUMBER	TRN NUMBER
LOCATION	255.30E.02	2-2-4	PAGE 2 OF 2



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## APPENDIX B

### Land Access References

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**Stephanie Garcia Richard**  
COMMISSIONER

**State of New Mexico**  
**Commissioner of Public Lands**  
310 OLD SANTA FE TRAIL  
P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

**COMMISSIONER'S OFFICE**  
Phone (505) 827-5760  
Fax (505) 827-5766  
[www.nmstatelands.org](http://www.nmstatelands.org)

## MEMORANDUM

**TO:** Ensolum, on behalf of XTO

**FROM:** Megan Weldy, Archaeologist/Conservationist  
(505) 827-5742  
[mweldy@nmslo.gov](mailto:mweldy@nmslo.gov)

**SUBJECT:** Ensolum on behalf of XTO  
Remediation for: 1st Spine Booster Site  
Section 02, T25S, R30E, N.M.P.M. Eddy County

**REFERENCE:** NMSLO Cultural Properties Protection Rule (19.2.24 NMAC)

**DATE:** 1/8/2026

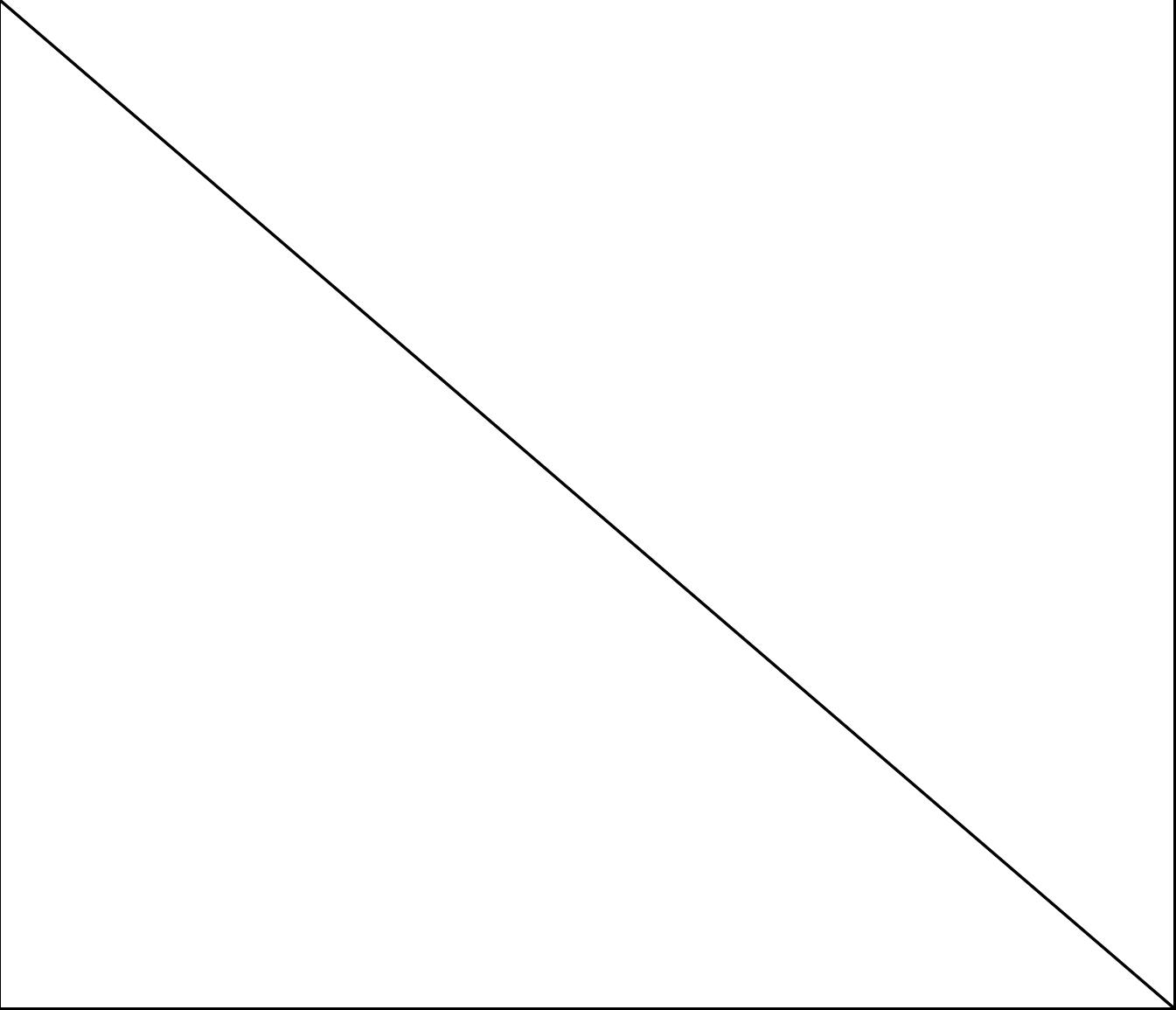
Thank you for your submission relating to the Proponent's proposed remediation activities at XTO's 1st Spine Booster Site. An archaeological survey of the entire area of potential effect has been completed and no cultural properties were identified. Pursuant to NMSLO 19.2.24.8 (C) NMAC, remediation may proceed.

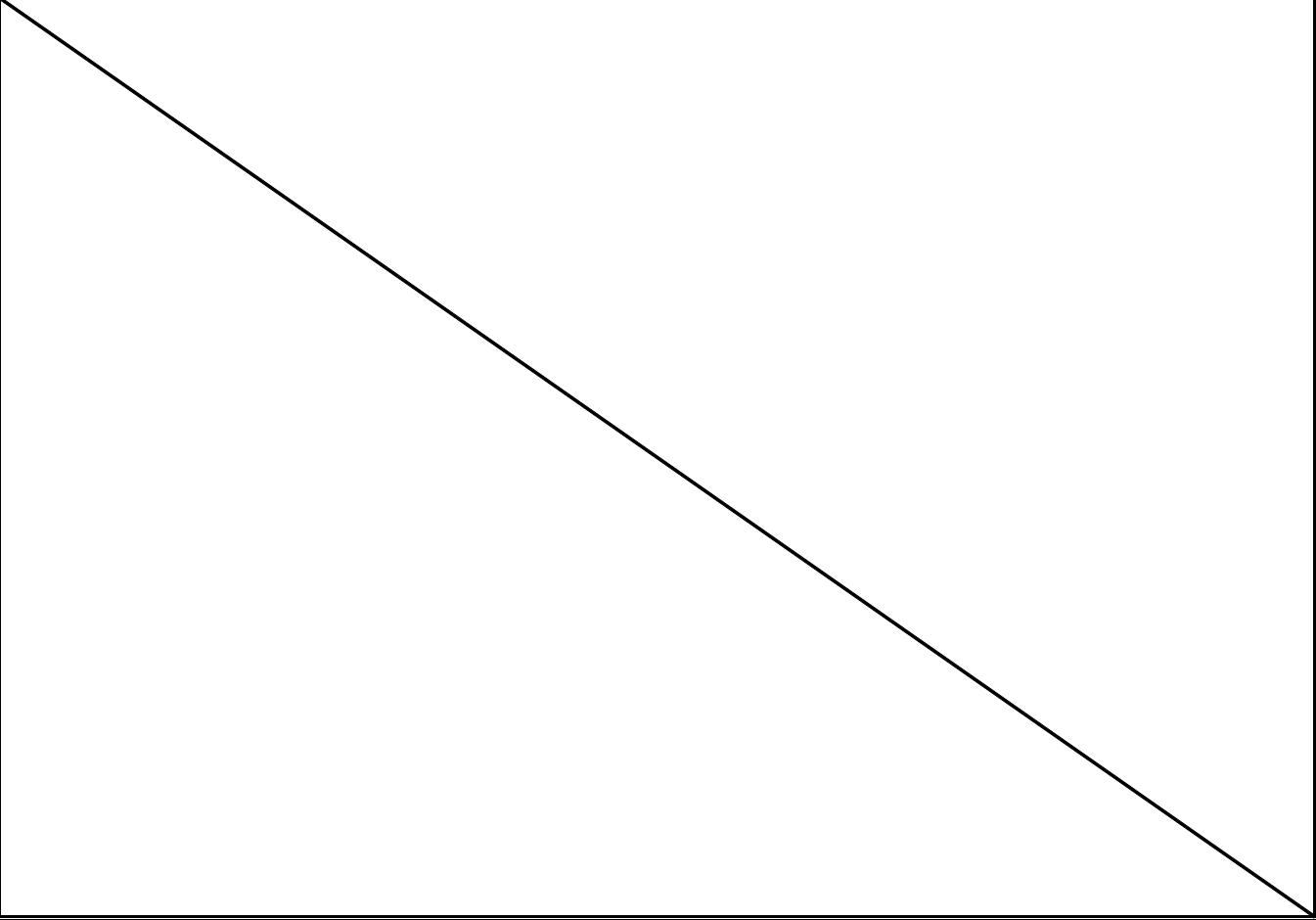
If any cultural materials are inadvertently encountered during surface disturbance, work must cease within 50 feet and the NMSLO Cultural Resources Office must be notified immediately by emailing ([CROinfo@nmslo.gov](mailto:CROinfo@nmslo.gov)). Please reach out if you have questions or need additional clarification.

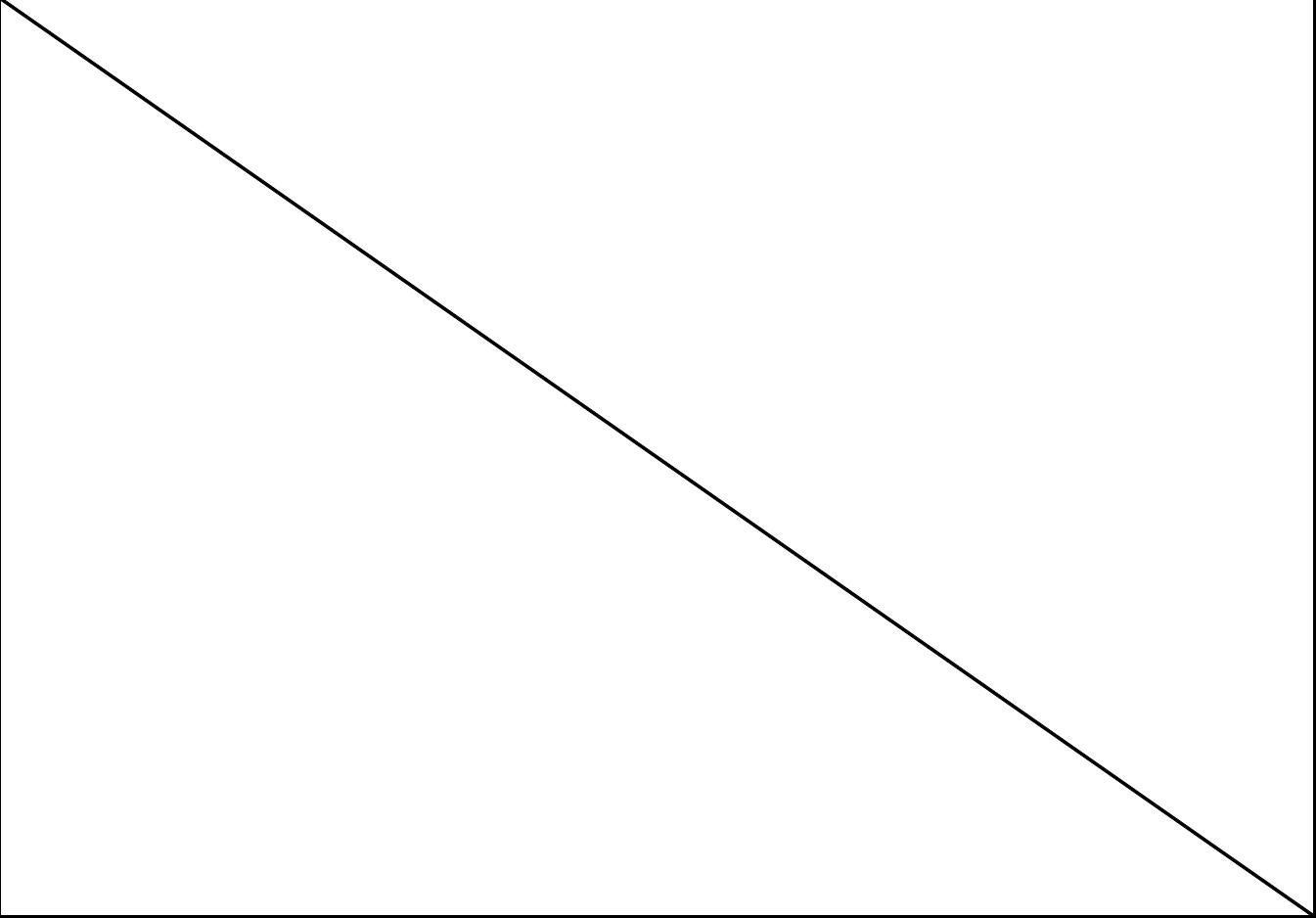


## APPENDIX C

### Lithologic Soil Sampling Logs

 <b>ENSOLUM</b>							Sample Name: BH01	Date: 11/7/2025	
							Site Name: Dog Town Draw PW Booster		
							Incident Number: nAPP2529655909		
							Job Number: 03C1558768		
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: Trevor Wargo		Method: Hand Auger		
Coordinates: 32.165634, -103.846623					Hole Diameter: 4"		Total Depth: 1 ft bgs		
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. A 40% chloride correction factor is included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
D	2,816.80	2.7	N	BH01	0.5	0	SC	0 - 1': Brown-red sand, fine grained, poorly graded, cohesive.	
D	240.8	1.7	N	BH01A	1	1		Total depth @ 1 ft bgs	
									

 <b>ENSOLUM</b>							Sample Name: BH02	Date: 11/7/2025					
							Site Name: Dog Town Draw PW Booster						
							Incident Number: nAPP2529655909						
							Job Number: 03C1558768						
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>							Logged By: Trevor Wargo	Method: Hand Auger					
Coordinates: 32.165578, -103.846697							Hole Diameter: 4"	Total Depth: 3 ft bgs					
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. A 40% chloride correction factor is included.													
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions					
D	1,657.60	0.7	N	BH02	0.5	0		0 - 3': Brown-red sand, fine grained, poorly graded, cohesive.					
D	812	0.8	N			1							
D	1,148	1.0	N			2							
D	173.6	0.6	N	BH02A	3	3							
Total Depth @ 3 ft bgs													
													

 <b>ENSOLUM</b>							Sample Name: BH03	Date: 11/7/2025	
							Site Name: Dog Town Draw PW Booster		
							Incident Number: nAPP2529655909		
							Job Number: 03C1558768		
<b>LITHOLOGIC / SOIL SAMPLING LOG</b>					Logged By: Trevor Wargo		Method: Hand Auger		
Coordinates: 32.165723, -103.846399					Hole Diameter: 4"		Total Depth: 3 ft bgs		
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. A 40% chloride correction factor is included.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
D	739.2	2.8	N	BH03	0.5	0	SC	0 - 0.5': Brown-red sand with caliche gravels (0.5 to 4 cm), fine grained, poorly graded, cohesive.	
D	3,460.8	2.9	N			1		0.5 - 3': Brown-red sand, fine grained, poorly graded, cohesive.	
D	2,469.6	1.5	N			2			
D	<173.6	1.3	N	BH03A	3	3			
Total Depth @ 3 ft bgs									
									



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## APPENDIX D

### Photographic Log



# ENSOLUM

## Photographic Log

XTO Energy, Inc  
Dog Town Draw PW Booster  
nAPP2529655909

<u>Photograph</u> 1	<u>Date</u> 10/23/2025	<p style="text-align: center;"><b>North East</b></p> <p>⌚ 46°NE (T) • 32.165598, -103.846675 ±9ft ▲ 3316ft</p>  <p>1st Spine Booster Station 10-23-2025 9:10:25 AM</p>
<u>Description</u> Initial release staining on pad and pasture		
<u>View</u> Northeast		
<u>Photograph</u> 2	<u>Date</u> 11/7/2025	<p style="text-align: center;">S 180 • • • 210 • • • 240 • • • 270 W</p> <p>⌚ 235°SW (T) • 32.165675, -103.846621 ±4m ▲ 1012m</p>  <p>1st Spine Booster Station 07 Nov 2025 13:14:03</p>
<u>Description</u> Initial release staining on pad; near BH01		
<u>View</u> Southwest		



# ENSOLUM

## Photographic Log

XTO Energy, Inc  
Dog Town Draw PW Booster  
nAPP2529655909

<u>Photograph</u> 3	<u>Date</u> 11/7/2025	
<u>Description</u> Initial release staining in pasture; near BH02		<u>View</u> Southwest
<u>Photograph</u> 4	<u>Date</u> 11/7/2025	
<u>Description</u> Initial release staining on pad; near BH03		<u>View</u> East



ENSOLUM

## Photographic Log

XTO Energy, Inc

Dog Town Draw PW Booster

nAPP2529655909

<u>Photograph</u> 5	<u>Date</u> 11/7/2025	
	<u>Description</u> Assessment sampling activities near SS01	
	<u>View</u> East	
<u>Photograph</u> 6	<u>Date</u> 11/7/2025	
	<u>Description</u> Assessment sampling activities near SS02 and SS03	
	<u>View</u> West	



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## APPENDIX E

### Laboratory Analytical Reports & Chain of Custody Documentation

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Environment Testing

1

2

3

4

5

6

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8

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10

11

12

13

14

# ANALYTICAL REPORT

## PREPARED FOR

Attn: Tracy Hillard  
Ensolum  
601 N. Marienfeld St.  
Suite 400  
Midland, Texas 79701

Generated 11/17/2025 12:44:10 PM

## JOB DESCRIPTION

1ST SPINE BOOSTER STATION  
03C1558768

## JOB NUMBER

890-9051-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

See page two for job notes and contact information.

# 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



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

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**Definitions/Glossary**

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

**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: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1

**Job ID: 890-9051-1****Eurofins Carlsbad****Job Narrative  
890-9051-1**

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 11/7/2025 4:59 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C.

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: BH 01 (890-9051-1), BH 01A (890-9051-2), BH 02 (890-9051-3), BH 02A (890-9051-4), BH 03 (890-9051-5), BH 03A (890-9051-6) and BH 03B (890-9051-7).

**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: BH 02 (890-9051-3), BH 02A (890-9051-4), BH 03 (890-9051-5), BH 03A (890-9051-6), BH 03B (890-9051-7), (890-9051-A-3-C MS) and (890-9051-A-3-D MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD\_NM: Surrogate recovery for the following samples were outside control limits: BH 01 (890-9051-1) and BH 01A (890-9051-2). 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 880-123610 and analytical batch 880-123813 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: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

**Client Sample ID: BH 01**  
 Date Collected: 11/07/25 13:02  
 Date Received: 11/07/25 16:59  
 Sample Depth: 0.5

**Lab Sample ID: 890-9051-1**  
 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		11/14/25 09:26	11/14/25 16:34	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 16:34	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 16:34	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 16:34	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 16:34	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 16:34	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		103		70 - 130		11/14/25 09:26	11/14/25 16:34	1
1,4-Difluorobenzene (Surr)		97		70 - 130		11/14/25 09:26	11/14/25 16:34	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			11/14/25 16:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			11/14/25 14:41	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	<49.8	U	49.8	mg/Kg		11/11/25 10:35	11/14/25 14:41	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/11/25 10:35	11/14/25 14:41	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/11/25 10:35	11/14/25 14:41	1
<b>Surrogate</b>								
1-Chlorooctane	58	S1-	70 - 130			11/11/25 10:35	11/14/25 14:41	1
<i>o</i> -Terphenyl	67	S1-	70 - 130			11/11/25 10:35	11/14/25 14:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2580	F1	50.3	mg/Kg			11/13/25 11:13	5

**Client Sample ID: BH 01A**

Date Collected: 11/07/25 13:04  
 Date Received: 11/07/25 16:59  
 Sample Depth: 1

**Lab Sample ID: 890-9051-2**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/14/25 09:26	11/14/25 16:55	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		103		70 - 130		11/14/25 09:26	11/14/25 16:55	1

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## Client Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

**Client Sample ID: BH 01A**  
Date Collected: 11/07/25 13:04  
Date Received: 11/07/25 16:59  
Sample Depth: 1

**Lab Sample ID: 890-9051-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130	11/14/25 09:26	11/14/25 16:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/14/25 16:55	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			11/14/25 14:56	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			11/11/25 10:35	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg			11/11/25 10:35	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg			11/11/25 10:35	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	60	S1-	70 - 130	11/11/25 10:35	11/14/25 14:56	1
o-Terphenyl	66	S1-	70 - 130	11/11/25 10:35	11/14/25 14:56	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	166		10.0	mg/Kg			11/13/25 11:29	1

**Client Sample ID: BH 02****Lab Sample ID: 890-9051-3**

Matrix: Solid

Date Collected: 11/07/25 13:21

Date Received: 11/07/25 16:59

Sample Depth: 0.5

**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			11/14/25 09:26	1
Toluene	<0.00198	U	0.00198	mg/Kg			11/14/25 09:26	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg			11/14/25 09:26	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg			11/14/25 09:26	1
o-Xylene	<0.00198	U	0.00198	mg/Kg			11/14/25 09:26	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg			11/14/25 09:26	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	11/14/25 09:26	11/14/25 17:16	1
1,4-Difluorobenzene (Surr)	105		70 - 130	11/14/25 09:26	11/14/25 17:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/14/25 17:16	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			11/14/25 09:17	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

## Client Sample ID: BH 02

## Lab Sample ID: 890-9051-3

Date Collected: 11/07/25 13:21

Matrix: Solid

Date Received: 11/07/25 16:59

Sample Depth: 0.5

## 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		11/11/25 10:35	11/14/25 09:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:35	11/14/25 09:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:35	11/14/25 09:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	65	S1-	70 - 130			11/11/25 10:35	11/14/25 09:17	1
o-Terphenyl	70		70 - 130			11/11/25 10:35	11/14/25 09:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1420		49.9	mg/Kg			11/13/25 11:34	5

## Client Sample ID: BH 02A

## Lab Sample ID: 890-9051-4

Date Collected: 11/07/25 13:50

Matrix: Solid

Date Received: 11/07/25 16:59

Sample Depth: 3

## 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		11/14/25 09:26	11/14/25 17:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 17:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 17:36	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/14/25 09:26	11/14/25 17:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 17:36	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/14/25 09:26	11/14/25 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			11/14/25 09:26	11/14/25 17:36	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/14/25 09:26	11/14/25 17:36	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			11/14/25 17:36	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			11/14/25 10:03	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	<49.9	U	49.9	mg/Kg		11/11/25 10:35	11/14/25 10:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/11/25 10:35	11/14/25 10:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/25 10:35	11/14/25 10:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	66	S1-	70 - 130			11/11/25 10:35	11/14/25 10:03	1
o-Terphenyl	71		70 - 130			11/11/25 10:35	11/14/25 10:03	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

**Client Sample ID: BH 02A**  
 Date Collected: 11/07/25 13:50  
 Date Received: 11/07/25 16:59  
 Sample Depth: 3

**Lab Sample ID: 890-9051-4**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		9.94	mg/Kg			11/13/25 11:40	1

**Client Sample ID: BH 03**  
 Date Collected: 11/07/25 14:40  
 Date Received: 11/07/25 16:59  
 Sample Depth: 0.5

**Lab Sample ID: 890-9051-5**  
 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		11/14/25 09:26	11/14/25 17:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 17:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 17:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 17:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 17:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			11/14/25 09:26	11/14/25 17:57	1
1,4-Difluorobenzene (Surr)	105		70 - 130			11/14/25 09:26	11/14/25 17:57	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			11/14/25 17:57	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			11/14/25 10:18	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		11/11/25 10:35	11/14/25 10:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:35	11/14/25 10:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:35	11/14/25 10:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	50	S1-	70 - 130			11/11/25 10:35	11/14/25 10:18	1
<i>o</i> -Terphenyl	55	S1-	70 - 130			11/11/25 10:35	11/14/25 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	923		9.92	mg/Kg			11/13/25 11:45	1

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## Client Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

**Client Sample ID: BH 03A**  
Date Collected: 11/07/25 14:41  
Date Received: 11/07/25 16:59  
Sample Depth: 1

**Lab Sample ID: 890-9051-6**  
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		11/13/25 20:20	11/14/25 14:38	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/13/25 20:20	11/14/25 14:38	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/13/25 20:20	11/14/25 14:38	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/13/25 20:20	11/14/25 14:38	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/13/25 20:20	11/14/25 14:38	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/13/25 20:20	11/14/25 14:38	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)	119			70 - 130		11/13/25 20:20	11/14/25 14:38	1
1,4-Difluorobenzene (Surr)	92			70 - 130		11/13/25 20:20	11/14/25 14:38	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			11/14/25 14:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			11/14/25 10:34	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	<50.1	U	50.1	mg/Kg		11/11/25 10:35	11/14/25 10:34	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		11/11/25 10:35	11/14/25 10:34	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		11/11/25 10:35	11/14/25 10:34	1
<b>Surrogate</b>								
1-Chlorooctane	69	S1-	70 - 130			11/11/25 10:35	11/14/25 10:34	1
<i>o</i> -Terphenyl	73		70 - 130			11/11/25 10:35	11/14/25 10:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3820		49.9	mg/Kg			11/13/25 12:01	5

**Client Sample ID: BH 03B**

Date Collected: 11/07/25 15:01  
Date Received: 11/07/25 16:59  
Sample Depth: 3

**Lab Sample ID: 890-9051-7**  
Matrix: Solid

**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		11/13/25 20:20	11/14/25 14:58	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/13/25 20:20	11/14/25 14:58	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/13/25 20:20	11/14/25 14:58	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/13/25 20:20	11/14/25 14:58	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/13/25 20:20	11/14/25 14:58	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/13/25 20:20	11/14/25 14:58	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)	118			70 - 130		11/13/25 20:20	11/14/25 14:58	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

**Client Sample ID: BH 03B**  
 Date Collected: 11/07/25 15:01  
 Date Received: 11/07/25 16:59  
 Sample Depth: 3

**Lab Sample ID: 890-9051-7**  
 Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Sur)	94		70 - 130	11/13/25 20:20	11/14/25 14:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/14/25 14:58	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			11/14/25 10:49	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			11/14/25 10:49	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg			11/14/25 10:49	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg			11/14/25 10:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	64	S1-	70 - 130	11/11/25 10:35	11/14/25 10:49	1
<i>o</i> -Terphenyl	72		70 - 130	11/11/25 10:35	11/14/25 10:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	224		9.96	mg/Kg			11/13/25 12:06	1

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## Surrogate Summary

Client: Ensolum

Job ID: 890-9051-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-64704-A-99-D MS	Matrix Spike	121	95
880-64704-A-99-E MSD	Matrix Spike Duplicate	125	96
890-9051-1	BH 01	103	97
890-9051-2	BH 01A	103	102
890-9051-3	BH 02	106	105
890-9051-4	BH 02A	104	104
890-9051-5	BH 03	107	105
890-9051-6	BH 03A	119	92
890-9051-7	BH 03B	118	94
890-9054-A-1-D MS	Matrix Spike	110	109
890-9054-A-1-E MSD	Matrix Spike Duplicate	98	121
LCS 880-124003/1-A	Lab Control Sample	120	98
LCS 880-124032/1-A	Lab Control Sample	101	112
LCSD 880-124003/2-A	Lab Control Sample Dup	118	95
LCSD 880-124032/2-A	Lab Control Sample Dup	102	114
MB 880-124003/5-A	Method Blank	109	87
MB 880-124032/5-A	Method Blank	106	94

## Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-9051-1	BH 01	58 S1-	67 S1-
890-9051-2	BH 01A	60 S1-	66 S1-
890-9051-3	BH 02	65 S1-	70
890-9051-3 MS	BH 02	68 S1-	76
890-9051-3 MSD	BH 02	68 S1-	75
890-9051-4	BH 02A	66 S1-	71
890-9051-5	BH 03	50 S1-	55 S1-
890-9051-6	BH 03A	69 S1-	73
890-9051-7	BH 03B	64 S1-	72
LCS 880-123662/2-A	Lab Control Sample	95	82
LCSD 880-123662/3-A	Lab Control Sample Dup	100	87
MB 880-123662/1-A	Method Blank	72	77

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATIONJob ID: 890-9051-1  
SDG: 03C1558768

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

Lab Sample ID: MB 880-124003/5-A

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 124003

Analyte	MB		RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg	11/13/25 20:20	11/14/25 09:50		1
Toluene	<0.00200	U	0.00200	mg/Kg	11/13/25 20:20	11/14/25 09:50		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	11/13/25 20:20	11/14/25 09:50		1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	11/13/25 20:20	11/14/25 09:50		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	11/13/25 20:20	11/14/25 09:50		1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	11/13/25 20:20	11/14/25 09:50		1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	109		70 - 130	11/13/25 20:20	11/14/25 09:50	1
1,4-Difluorobenzene (Surr)	87		70 - 130	11/13/25 20:20	11/14/25 09:50	1

Lab Sample ID: LCS 880-124003/1-A

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124003

Analyte	Spike		Unit	D	%Rec	
	Added	Result			%Rec	Limits
Benzene	0.100	0.1034	mg/Kg	103	70 - 130	
Toluene	0.100	0.09468	mg/Kg	95	70 - 130	
Ethylbenzene	0.100	0.1018	mg/Kg	102	70 - 130	
m-Xylene & p-Xylene	0.200	0.1980	mg/Kg	99	70 - 130	
o-Xylene	0.100	0.09976	mg/Kg	100	70 - 130	

Surrogate	LCS		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	120		70 - 130			
1,4-Difluorobenzene (Surr)	98		70 - 130			

Lab Sample ID: LCSD 880-124003/2-A

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 124003

Analyte	Spike		Unit	D	%Rec		RPD	Limit
	Added	Result			%Rec	Limits		
Benzene	0.100	0.1075	mg/Kg	107	70 - 130		4	35
Toluene	0.100	0.09990	mg/Kg	100	70 - 130		5	35
Ethylbenzene	0.100	0.1059	mg/Kg	106	70 - 130		4	35
m-Xylene & p-Xylene	0.200	0.2051	mg/Kg	103	70 - 130		3	35
o-Xylene	0.100	0.1043	mg/Kg	104	70 - 130		4	35

Surrogate	LCSD		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
4-Bromofluorobenzene (Surr)	118		70 - 130			
1,4-Difluorobenzene (Surr)	95		70 - 130			

Lab Sample ID: 880-64704-A-99-D MS

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124003

Analyte	Sample		Spike	Unit	%Rec		RPD
	Result	Qualifier			Added	Result	
Benzene	<0.00200	U	0.100	mg/Kg	117	70 - 130	
Toluene	<0.00200	U	0.100	mg/Kg	109	70 - 130	

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

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

Lab Sample ID: 880-64704-A-99-D MS

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124003

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.1186		mg/Kg	119	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2344		mg/Kg	117	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1165		mg/Kg	116	70 - 130	
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	121			70 - 130					
1,4-Difluorobenzene (Surr)	95			70 - 130					

Lab Sample ID: 880-64704-A-99-E MSD

Matrix: Solid

Analysis Batch: 124016

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124003

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00200	U	0.100	0.1106		mg/Kg	111	70 - 130	
Toluene	<0.00200	U	0.100	0.1037		mg/Kg	104	70 - 130	
Ethylbenzene	<0.00200	U	0.100	0.1133		mg/Kg	113	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2241		mg/Kg	112	70 - 130	
o-Xylene	<0.00200	U	0.100	0.1113		mg/Kg	111	70 - 130	
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>					
4-Bromofluorobenzene (Surr)	125			70 - 130					
1,4-Difluorobenzene (Surr)	96			70 - 130					

Lab Sample ID: MB 880-124032/5-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 124032

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Benzene	<0.00200	U	0.00200	mg/Kg	11/14/25 09:26	11/14/25 11:34		1
Toluene	<0.00200	U	0.00200	mg/Kg	11/14/25 09:26	11/14/25 11:34		1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	11/14/25 09:26	11/14/25 11:34		1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	11/14/25 09:26	11/14/25 11:34		1
o-Xylene	<0.00200	U	0.00200	mg/Kg	11/14/25 09:26	11/14/25 11:34		1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	11/14/25 09:26	11/14/25 11:34		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		11/14/25 09:26	11/14/25 11:34	1
1,4-Difluorobenzene (Surr)	94			70 - 130		11/14/25 09:26	11/14/25 11:34	1

Lab Sample ID: LCS 880-124032/1-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Benzene	0.100	0.1026		mg/Kg	103	70 - 130	
Toluene	0.100	0.08447		mg/Kg	84	70 - 130	
Ethylbenzene	0.100	0.09191		mg/Kg	92	70 - 130	
m-Xylene & p-Xylene	0.200	0.1935		mg/Kg	97	70 - 130	

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

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

Lab Sample ID: LCS 880-124032/1-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124032

Analyte		Spike	LCS	LCS	Unit	D	%Rec	Limits	
		Added	Result	Qualifier					
o-Xylene		0.100	0.1003		mg/Kg		100	70 - 130	
<b>Surrogate</b>									
4-Bromofluorobenzene (Surr)	101			70 - 130					
1,4-Difluorobenzene (Surr)	112			70 - 130					

Lab Sample ID: LCSD 880-124032/2-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 124032

Analyte		Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
		Added	Result	Qualifier						
Benzene		0.100	0.1047		mg/Kg		105	70 - 130	2	35
Toluene		0.100	0.08753		mg/Kg		88	70 - 130	4	35
Ethylbenzene		0.100	0.09676		mg/Kg		97	70 - 130	5	35
m-Xylene & p-Xylene		0.200	0.2043		mg/Kg		102	70 - 130	5	35
o-Xylene		0.100	0.1056		mg/Kg		106	70 - 130	5	35
<b>Surrogate</b>										
4-Bromofluorobenzene (Surr)	102			70 - 130						
1,4-Difluorobenzene (Surr)	114			70 - 130						

Lab Sample ID: 890-9054-A-1-D MS

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier					
Benzene	<0.00200	U	0.100	0.09914		mg/Kg		99	70 - 130	
Toluene	<0.00200	U	0.100	0.08444		mg/Kg		84	70 - 130	
Ethylbenzene	<0.00200	U	0.100	0.09352		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1971		mg/Kg		99	70 - 130	
o-Xylene	<0.00200	U	0.100	0.09938		mg/Kg		99	70 - 130	
<b>Surrogate</b>										
4-Bromofluorobenzene (Surr)	110			70 - 130						
1,4-Difluorobenzene (Surr)	109			70 - 130						

Lab Sample ID: 890-9054-A-1-E MSD

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.00200	U	0.100	0.1062		mg/Kg		106	70 - 130	7	35
Toluene	<0.00200	U	0.100	0.08674		mg/Kg		87	70 - 130	3	35
Ethylbenzene	<0.00200	U	0.100	0.09450		mg/Kg		95	70 - 130	1	35
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2029		mg/Kg		101	70 - 130	3	35
o-Xylene	<0.00200	U	0.100	0.1024		mg/Kg		102	70 - 130	3	35

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

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

Lab Sample ID: 890-9054-A-1-E MSD

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124032

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98				70 - 130
1,4-Difluorobenzene (Surr)	121				70 - 130

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

Lab Sample ID: MB 880-123662/1-A

Matrix: Solid

Analysis Batch: 124025

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 123662

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U			50.0	mg/Kg		11/11/25 10:35	11/14/25 06:09	1
Diesel Range Organics (Over C10-C28)	<50.0	U			50.0	mg/Kg		11/11/25 10:35	11/14/25 06:09	1
Oil Range Organics (Over C28-C36)	<50.0	U			50.0	mg/Kg		11/11/25 10:35	11/14/25 06:09	1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	72				70 - 130	11/11/25 10:35	11/14/25 06:09	1
o-Terphenyl	77				70 - 130	11/11/25 10:35	11/14/25 06:09	1

Lab Sample ID: LCS 880-123662/2-A

Matrix: Solid

Analysis Batch: 124025

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123662

Analyte	Spike	LCS	LCS	%Rec				
	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	1052		mg/Kg		105	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	914.9		mg/Kg		91	70 - 130	

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1-Chlorooctane	95				70 - 130
o-Terphenyl	82				70 - 130

Lab Sample ID: LCSD 880-123662/3-A

Matrix: Solid

Analysis Batch: 124025

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 123662

Analyte	Spike	LCSD	LCSD	%Rec					
	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1084		mg/Kg		108	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	1000	973.5		mg/Kg		97	70 - 130	6	20

Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits
1-Chlorooctane	100				70 - 130
o-Terphenyl	87				70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

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

Lab Sample ID: 890-9051-3 MS

Matrix: Solid

Analysis Batch: 124025

Client Sample ID: BH 02

Prep Type: Total/NA

Prep Batch: 123662

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	907.1		mg/Kg		88	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	842.4		mg/Kg		84	70 - 130
<b>Surrogate</b>									
MS Result %Recovery Qualifier Limits									
1-Chlorooctane	68	S1-		70 - 130					
o-Terphenyl	76			70 - 130					

Lab Sample ID: 890-9051-3 MSD

Matrix: Solid

Analysis Batch: 124025

Client Sample ID: BH 02

Prep Type: Total/NA

Prep Batch: 123662

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	1000	901.3		mg/Kg		88	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	1000	851.7		mg/Kg		85	70 - 130	1	20
<b>Surrogate</b>											
MSD Result %Recovery Qualifier Limits											
1-Chlorooctane	68	S1-		70 - 130							
o-Terphenyl	75			70 - 130							

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-123610/1-A

Client Sample ID: Method Blank

Prep Type: Soluble

Analysis Batch: 123813

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<10.0	U	10.0	mg/Kg			11/13/25 10:58	1

Lab Sample ID: LCS 880-123610/2-A

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analysis Batch: 123813

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Chloride	250	233.2		mg/Kg		93	90 - 110

Lab Sample ID: LCSD 880-123610/3-A

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analysis Batch: 123813

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	234.4		mg/Kg		94	90 - 110	0	20

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## QC Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

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

Lab Sample ID: 890-9051-1 MS

Matrix: Solid

Analysis Batch: 123813

Client Sample ID: BH 01  
 Prep Type: Soluble

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
Chloride	2580	F1	1260	4201	F1	mg/Kg	129	90 - 110			

Lab Sample ID: 890-9051-1 MSD

Matrix: Solid

Analysis Batch: 123813

Client Sample ID: BH 01  
 Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Chloride	2580	F1	1260	4209	F1	mg/Kg	130	90 - 110	0	20	

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## QC Association Summary

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

## GC VOA

## Prep Batch: 124003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-6	BH 03A	Total/NA	Solid	5035	
890-9051-7	BH 03B	Total/NA	Solid	5035	
MB 880-124003/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-124003/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-124003/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-64704-A-99-D MS	Matrix Spike	Total/NA	Solid	5035	
880-64704-A-99-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 124016

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-6	BH 03A	Total/NA	Solid	8021B	124003
890-9051-7	BH 03B	Total/NA	Solid	8021B	124003
MB 880-124003/5-A	Method Blank	Total/NA	Solid	8021B	124003
LCS 880-124003/1-A	Lab Control Sample	Total/NA	Solid	8021B	124003
LCSD 880-124003/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	124003
880-64704-A-99-D MS	Matrix Spike	Total/NA	Solid	8021B	124003
880-64704-A-99-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	124003

## Analysis Batch: 124020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	8021B	124032
890-9051-2	BH 01A	Total/NA	Solid	8021B	124032
890-9051-3	BH 02	Total/NA	Solid	8021B	124032
890-9051-4	BH 02A	Total/NA	Solid	8021B	124032
890-9051-5	BH 03	Total/NA	Solid	8021B	124032
MB 880-124032/5-A	Method Blank	Total/NA	Solid	8021B	124032
LCS 880-124032/1-A	Lab Control Sample	Total/NA	Solid	8021B	124032
LCSD 880-124032/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	124032
890-9054-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	124032
890-9054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	124032

## Prep Batch: 124032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	5035	
890-9051-2	BH 01A	Total/NA	Solid	5035	
890-9051-3	BH 02	Total/NA	Solid	5035	
890-9051-4	BH 02A	Total/NA	Solid	5035	
890-9051-5	BH 03	Total/NA	Solid	5035	
MB 880-124032/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-124032/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-124032/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-9054-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-9054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 124186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	Total BTEX	
890-9051-2	BH 01A	Total/NA	Solid	Total BTEX	
890-9051-3	BH 02	Total/NA	Solid	Total BTEX	
890-9051-4	BH 02A	Total/NA	Solid	Total BTEX	
890-9051-5	BH 03	Total/NA	Solid	Total BTEX	

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## QC Association Summary

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATIONJob ID: 890-9051-1  
SDG: 03C1558768

## GC VOA (Continued)

## Analysis Batch: 124186 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-6	BH 03A	Total/NA	Solid	Total BTEX	
890-9051-7	BH 03B	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 123662

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	8015NM Prep	
890-9051-2	BH 01A	Total/NA	Solid	8015NM Prep	
890-9051-3	BH 02	Total/NA	Solid	8015NM Prep	
890-9051-4	BH 02A	Total/NA	Solid	8015NM Prep	
890-9051-5	BH 03	Total/NA	Solid	8015NM Prep	
890-9051-6	BH 03A	Total/NA	Solid	8015NM Prep	
890-9051-7	BH 03B	Total/NA	Solid	8015NM Prep	
MB 880-123662/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-123662/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-123662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-9051-3 MS	BH 02	Total/NA	Solid	8015NM Prep	
890-9051-3 MSD	BH 02	Total/NA	Solid	8015NM Prep	

## Analysis Batch: 124025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	8015B NM	123662
890-9051-2	BH 01A	Total/NA	Solid	8015B NM	123662
890-9051-3	BH 02	Total/NA	Solid	8015B NM	123662
890-9051-4	BH 02A	Total/NA	Solid	8015B NM	123662
890-9051-5	BH 03	Total/NA	Solid	8015B NM	123662
890-9051-6	BH 03A	Total/NA	Solid	8015B NM	123662
890-9051-7	BH 03B	Total/NA	Solid	8015B NM	123662
MB 880-123662/1-A	Method Blank	Total/NA	Solid	8015B NM	123662
LCS 880-123662/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	123662
LCSD 880-123662/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	123662
890-9051-3 MS	BH 02	Total/NA	Solid	8015B NM	123662
890-9051-3 MSD	BH 02	Total/NA	Solid	8015B NM	123662

## Analysis Batch: 124167

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Total/NA	Solid	8015 NM	
890-9051-2	BH 01A	Total/NA	Solid	8015 NM	
890-9051-3	BH 02	Total/NA	Solid	8015 NM	
890-9051-4	BH 02A	Total/NA	Solid	8015 NM	
890-9051-5	BH 03	Total/NA	Solid	8015 NM	
890-9051-6	BH 03A	Total/NA	Solid	8015 NM	
890-9051-7	BH 03B	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 123610

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Soluble	Solid	DI Leach	
890-9051-2	BH 01A	Soluble	Solid	DI Leach	
890-9051-3	BH 02	Soluble	Solid	DI Leach	

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## QC Association Summary

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

## HPLC/IC (Continued)

## Leach Batch: 123610 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-4	BH 02A	Soluble	Solid	DI Leach	
890-9051-5	BH 03	Soluble	Solid	DI Leach	
890-9051-6	BH 03A	Soluble	Solid	DI Leach	
890-9051-7	BH 03B	Soluble	Solid	DI Leach	
MB 880-123610/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-123610/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-123610/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-9051-1 MS	BH 01	Soluble	Solid	DI Leach	
890-9051-1 MSD	BH 01	Soluble	Solid	DI Leach	

## Analysis Batch: 123813

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9051-1	BH 01	Soluble	Solid	300.0	123610
890-9051-2	BH 01A	Soluble	Solid	300.0	123610
890-9051-3	BH 02	Soluble	Solid	300.0	123610
890-9051-4	BH 02A	Soluble	Solid	300.0	123610
890-9051-5	BH 03	Soluble	Solid	300.0	123610
890-9051-6	BH 03A	Soluble	Solid	300.0	123610
890-9051-7	BH 03B	Soluble	Solid	300.0	123610
MB 880-123610/1-A	Method Blank	Soluble	Solid	300.0	123610
LCS 880-123610/2-A	Lab Control Sample	Soluble	Solid	300.0	123610
LCSD 880-123610/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	123610
890-9051-1 MS	BH 01	Soluble	Solid	300.0	123610
890-9051-1 MSD	BH 01	Soluble	Solid	300.0	123610

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## Lab Chronicle

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

## Client Sample ID: BH 01

Date Collected: 11/07/25 13:02

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9051-1

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			4.97 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 16:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 16:34	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 14:41	SA	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 14:41	FC	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		5			123813	11/13/25 11:13	CS	EET MID

## Client Sample ID: BH 01A

Date Collected: 11/07/25 13:04

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9051-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 16:55	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 16:55	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 14:56	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 14:56	FC	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		1			123813	11/13/25 11:29	CS	EET MID

## Client Sample ID: BH 02

Date Collected: 11/07/25 13:21

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9051-3

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			5.05 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 17:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 17:16	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 09:17	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 09:17	FC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		5			123813	11/13/25 11:34	CS	EET MID

## Client Sample ID: BH 02A

Date Collected: 11/07/25 13:50

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9051-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 17:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 17:36	SA	EET MID

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## Lab Chronicle

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
SDG: 03C1558768

## Client Sample ID: BH 02A

Lab Sample ID: 890-9051-4

Matrix: Solid

Date Collected: 11/07/25 13:50  
Date Received: 11/07/25 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			124167	11/14/25 10:03	SA	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 10:03	FC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		1			123813	11/13/25 11:40	CS	EET MID

## Client Sample ID: BH 03

Lab Sample ID: 890-9051-5

Matrix: Solid

Date Collected: 11/07/25 14:40  
Date Received: 11/07/25 16:59

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	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 17:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 17:57	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 10:18	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 10:18	FC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		1			123813	11/13/25 11:45	CS	EET MID

## Client Sample ID: BH 03A

Lab Sample ID: 890-9051-6

Matrix: Solid

Date Collected: 11/07/25 14:41  
Date Received: 11/07/25 16:59

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	124003	11/13/25 20:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124016	11/14/25 14:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 14:38	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 10:34	SA	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 10:34	FC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		5			123813	11/13/25 12:01	CS	EET MID

## Client Sample ID: BH 03B

Lab Sample ID: 890-9051-7

Matrix: Solid

Date Collected: 11/07/25 15:01  
Date Received: 11/07/25 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	124003	11/13/25 20:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124016	11/14/25 14:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124186	11/14/25 14:58	SA	EET MID
Total/NA	Analysis	8015 NM		1			124167	11/14/25 10:49	SA	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10.00 mL	123662	11/11/25 10:35	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124025	11/14/25 10:49	FC	EET MID

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**Lab Chronicle**

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

**Client Sample ID: BH 03B****Lab Sample ID: 890-9051-7**

Matrix: Solid

Date Collected: 11/07/25 15:01  
 Date Received: 11/07/25 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	123610	11/10/25 16:25	SA	EET MID
Soluble	Analysis	300.0		1			123813	11/13/25 12:06	CS	EET MID

**Laboratory References:**

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

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## Accreditation/Certification Summary

Client: Ensolum

Job ID: 890-9051-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

### **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

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**Method Summary**

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9051-1  
 SDG: 03C1558768

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: 890-9051-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-9051-1	BH 01	Solid	11/07/25 13:02	11/07/25 16:59	0.5	1
890-9051-2	BH 01A	Solid	11/07/25 13:04	11/07/25 16:59	1	2
890-9051-3	BH 02	Solid	11/07/25 13:21	11/07/25 16:59	0.5	3
890-9051-4	BH 02A	Solid	11/07/25 13:50	11/07/25 16:59	3	4
890-9051-5	BH 03	Solid	11/07/25 14:40	11/07/25 16:59	0.5	5
890-9051-6	BH 03A	Solid	11/07/25 14:41	11/07/25 16:59	1	6
890-9051-7	BH 03B	Solid	11/07/25 15:01	11/07/25 16:59	3	7

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## Environment Testing

Kenco

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

## Chain of Custody

Work Order No: \_\_\_\_\_

Page 1 of 1

Project Manager:	Tracy Hillard	Bill to: (if different)	X TO Energy, Inc
Company Name:	Ensolum	Company Name:	3201 E Greene St
Address:	3122 National Parks Hwy	Address:	Carlsbad NM 88220
City, State ZIP:	Carlsbad NM 88220	City, State ZIP:	Carlsbad NM 88220
Phone:	(575) 937-3906	Email:	THillard@ensolum.com, TWard@ensolum.com

Project Name:	1st Spine Postee Station	Turn Around	ANALYSIS REQUEST	Preservative Codes
Project Number:	Q3C 1558768	☐ Routine	☐ Rush	None: NO
Project Location:	32.16541, -103.81712	Due Date:		DI Water: H <sub>2</sub> O
Sampler's Name:	Trevor Waggon	TAT starts the day received by the lab, if received by 4:30pm		Cool: Cool
PO #:				MeOH: Me
SAMPLE RECEIPT		Temp Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wet Ice: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	HCL: HC
Samples Received Intact:		Thermometer ID: <u>100002</u>	Parameters	H <sub>2</sub> SO <sub>4</sub> : H <sub>2</sub>
Cooler Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Correction Factor: <u>1.02</u>	NaHSO <sub>4</sub> : NABIS
Sample Custody Seals:		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Temperature Reading: <u>4.42</u>	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> : NaSO <sub>3</sub>
Total Containers:			Corrected Temperature:	Zn+Acetate+NaOH+Zn
				NaOH+Ascorbic Acid: SAPC



890-9051 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Sample Comments
BH01	soil	11/07/25	13:02	0.5	G	1	
BH01A			13:04	1			
BH02			13:21	0.5			
BH02A			13:50	3			
BH03			14:40	0.5			
BH03A			14:41	1			
BH03C			15:01	3	✓	✓✓✓	TPW

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO<sub>2</sub> Na Sr Ti Sn U V Zn

Circle Method(s) and Metal(s) to be analyzed      TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U      Hg:1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Received by: (Signature)	Date/Time
1 <u>Tracy Wager</u>	2 <u>BSuny</u>	3 <u>11/16/25</u>	4	5

TMorrissey@ensolum.com

Incident # 1NAPP2629655909  
CC: 1081711001  
CER: 4C

Revised Date: 08/25/2020 Rev. 2020.2



## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-9051-1

SDG Number: 03C1558768

**Login Number: 9051****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: 890-9051-1

SDG Number: 03C1558768

**Login Number: 9051****List Source: Eurofins Midland****List Number: 2****List Creation: 11/11/25 08:24 AM****Creator: Lee, Randall**

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: Tracy Hillard  
Ensolum  
601 N. Marienfeld St.  
Suite 400  
Midland, Texas 79701

Generated 11/17/2025 12:44:21 PM

## JOB DESCRIPTION

1ST SPINE BOOSTER STATION  
03C1558768

## JOB NUMBER

890-9053-1

Eurofins Carlsbad  
1089 N Canal St.  
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 1/23/2026 6:51:34 AM

# 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



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

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11/17/2025 12:44:21 PM

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**Definitions/Glossary**

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

**Qualifiers****GC VOA**

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

**GC Semi VOA**

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

**HPLC/IC**

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
U	Indicates the analyte was analyzed for but not detected.

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

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

**Case Narrative**

Client: Ensolum  
 Project: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1

**Job ID: 890-9053-1****Eurofins Carlsbad****Job Narrative  
890-9053-1**

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 11/7/2025 4:59 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.2°C.

**Receipt Exceptions**

The following samples were received and analyzed from an unpreserved bulk soil jar: SS 01 (890-9053-1), SS 02 (890-9053-2), SS 03 (890-9053-3), SS 04 (890-9053-4), SS 05 (890-9053-5) and SS 06 (890-9053-6).

**GC VOA**

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

**Diesel Range Organics**

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

**HPLC/IC**

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

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

## Client Sample ID: SS 01

Lab Sample ID: 890-9053-1

Matrix: Solid

Date Collected: 11/07/25 10:56

Date Received: 11/07/25 16:59

Sample Depth: SURFACE

## 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		11/14/25 09:26	11/14/25 13:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 13:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 13:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 13:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 13:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 13:18	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)		96		70 - 130		11/14/25 09:26	11/14/25 13:18	1
1,4-Difluorobenzene (Surr)		103		70 - 130		11/14/25 09:26	11/14/25 13:18	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			11/14/25 13:18	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			11/14/25 10:03	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		11/11/25 10:38	11/14/25 10:03	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 10:03	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 10:03	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	162		10.1	mg/Kg			11/13/25 02:02	1

## Client Sample ID: SS 02

Lab Sample ID: 890-9053-2

Matrix: Solid

Date Collected: 11/07/25 10:57

Date Received: 11/07/25 16:59

Sample Depth: SURFACE

## 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		11/14/25 09:26	11/14/25 13:38	1
Toluene	<0.00202	U	0.00202	mg/Kg		11/14/25 09:26	11/14/25 13:38	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		11/14/25 09:26	11/14/25 13:38	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		11/14/25 09:26	11/14/25 13:38	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		11/14/25 09:26	11/14/25 13:38	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		11/14/25 09:26	11/14/25 13:38	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		100		70 - 130		11/14/25 09:26	11/14/25 13:38	1

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## Client Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
SDG: 03C1558768

**Client Sample ID: SS 02**  
Date Collected: 11/07/25 10:57  
Date Received: 11/07/25 16:59  
Sample Depth: SURFACE

**Lab Sample ID: 890-9053-2**  
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	11/14/25 09:26	11/14/25 13:38	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			11/14/25 13:38	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			11/14/25 10:18	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			11/14/25 10:18	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg			11/14/25 10:18	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg			11/14/25 10:18	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130	11/14/25 10:18	11/14/25 10:18	1
<i>o</i> -Terphenyl	91		70 - 130	11/14/25 10:18	11/14/25 10:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.96	U	9.96	mg/Kg			11/13/25 02:07	1

**Client Sample ID: SS 03****Lab Sample ID: 890-9053-3**

Matrix: Solid

Date Collected: 11/07/25 11:28

Date Received: 11/07/25 16:59

Sample Depth: SURFACE

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg			11/14/25 13:59	1
Toluene	<0.00199	U	0.00199	mg/Kg			11/14/25 13:59	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg			11/14/25 13:59	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg			11/14/25 13:59	1
<i>o</i> -Xylene	<0.00199	U	0.00199	mg/Kg			11/14/25 13:59	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg			11/14/25 13:59	1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	11/14/25 13:59	11/14/25 13:59	1
1,4-Difluorobenzene (Surr)	102		70 - 130	11/14/25 13:59	11/14/25 13:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/14/25 13:59	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			11/14/25 10:34	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

## Client Sample ID: SS 03

Lab Sample ID: 890-9053-3

Matrix: Solid

Date Collected: 11/07/25 11:28

Date Received: 11/07/25 16:59

Sample Depth: SURFACE

## 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		11/11/25 10:38	11/14/25 10:34	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 10:34	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 10:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	73		70 - 130			11/11/25 10:38	11/14/25 10:34	1
o-Terphenyl	87		70 - 130			11/11/25 10:38	11/14/25 10:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.3		9.98	mg/Kg			11/13/25 02:25	1

## Client Sample ID: SS 04

Lab Sample ID: 890-9053-4

Matrix: Solid

Date Collected: 11/07/25 11:13

Date Received: 11/07/25 16:59

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		11/14/25 09:26	11/14/25 14:19	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/14/25 09:26	11/14/25 14:19	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/14/25 09:26	11/14/25 14:19	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		11/14/25 09:26	11/14/25 14:19	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/14/25 09:26	11/14/25 14:19	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/14/25 09:26	11/14/25 14:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			11/14/25 09:26	11/14/25 14:19	1
1,4-Difluorobenzene (Surr)	99		70 - 130			11/14/25 09:26	11/14/25 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			11/14/25 14:19	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			11/14/25 10:49	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		11/11/25 10:38	11/14/25 10:49	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/11/25 10:38	11/14/25 10:49	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/11/25 10:38	11/14/25 10:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	80		70 - 130			11/11/25 10:38	11/14/25 10:49	1
o-Terphenyl	91		70 - 130			11/11/25 10:38	11/14/25 10:49	1

Eurofins Carlsbad

## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

**Client Sample ID: SS 04**  
 Date Collected: 11/07/25 11:13  
 Date Received: 11/07/25 16:59  
 Sample Depth: SURFACE

**Lab Sample ID: 890-9053-4**  
 Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		9.94	mg/Kg			11/13/25 02:31	1

**Client Sample ID: SS 05**  
 Date Collected: 11/07/25 11:29  
 Date Received: 11/07/25 16:59  
 Sample Depth: SURFACE

**Lab Sample ID: 890-9053-5**  
 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		11/14/25 09:26	11/14/25 14:40	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 14:40	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 14:40	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/14/25 09:26	11/14/25 14:40	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/14/25 09:26	11/14/25 14:40	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/14/25 09:26	11/14/25 14:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			11/14/25 09:26	11/14/25 14:40	1
1,4-Difluorobenzene (Surr)	101		70 - 130			11/14/25 09:26	11/14/25 14:40	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			11/14/25 14:40	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			11/14/25 11:05	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		11/11/25 10:38	11/14/25 11:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 11:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 11:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	75		70 - 130			11/11/25 10:38	11/14/25 11:05	1
<i>o</i> -Terphenyl	91		70 - 130			11/11/25 10:38	11/14/25 11:05	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.92	U	9.92	mg/Kg			11/13/25 02:37	1

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## Client Sample Results

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

**Client Sample ID: SS 06**  
 Date Collected: 11/07/25 12:12  
 Date Received: 11/07/25 16:59  
 Sample Depth: SURFACE

**Lab Sample ID: 890-9053-6**  
 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		11/14/25 09:26	11/14/25 15:00	1
Toluene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 15:00	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 15:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 15:00	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		11/14/25 09:26	11/14/25 15:00	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		11/14/25 09:26	11/14/25 15:00	1
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>		<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
4-Bromofluorobenzene (Surr)		107		70 - 130		11/14/25 09:26	11/14/25 15:00	1
1,4-Difluorobenzene (Surr)		99		70 - 130		11/14/25 09:26	11/14/25 15:00	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			11/14/25 15:00	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			11/14/25 11:20	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		11/11/25 10:38	11/14/25 11:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 11:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/11/25 10:38	11/14/25 11:20	1
<b>Surrogate</b>								
1-Chlorooctane	76		70 - 130			11/11/25 10:38	11/14/25 11:20	1
<i>o</i> -Terphenyl	87		70 - 130			11/11/25 10:38	11/14/25 11:20	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<9.90	U	9.90	mg/Kg			11/13/25 02:43	1

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## Surrogate Summary

Client: Ensolum

Job ID: 890-9053-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

## 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)									
890-9053-1	SS 01	96	103									
890-9053-2	SS 02	100	104									
890-9053-3	SS 03	103	102									
890-9053-4	SS 04	103	99									
890-9053-5	SS 05	100	101									
890-9053-6	SS 06	107	99									
890-9054-A-1-D MS	Matrix Spike	110	109									
890-9054-A-1-E MSD	Matrix Spike Duplicate	98	121									
LCS 880-124032/1-A	Lab Control Sample	101	112									
LCSD 880-124032/2-A	Lab Control Sample Dup	102	114									
MB 880-124032/5-A	Method Blank	106	94									

## 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)									
890-9052-A-16-C MS	Matrix Spike	74	92									
890-9052-A-16-D MSD	Matrix Spike Duplicate	73	93									
890-9053-1	SS 01	76	95									
890-9053-2	SS 02	75	91									
890-9053-3	SS 03	73	87									
890-9053-4	SS 04	80	91									
890-9053-5	SS 05	75	91									
890-9053-6	SS 06	76	87									
LCS 880-123663/2-A	Lab Control Sample	82	101									
LCSD 880-123663/3-A	Lab Control Sample Dup	81	100									
MB 880-123663/1-A	Method Blank	96	115									

## Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATIONJob ID: 890-9053-1  
SDG: 03C1558768

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

Lab Sample ID: MB 880-124032/5-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 124032

Analyte	MB	MB	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Benzene	<0.00200	U	0.00200		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
Toluene	<0.00200	U	0.00200		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
o-Xylene	<0.00200	U	0.00200		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg	11/14/25 09:26		11/14/25 11:34		1
Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
	Result	Qualifier								
4-Bromofluorobenzene (Surr)	106		70 - 130			11/14/25 09:26		11/14/25 11:34		1
1,4-Difluorobenzene (Surr)	94		70 - 130			11/14/25 09:26		11/14/25 11:34		1

Lab Sample ID: LCS 880-124032/1-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Spikes	LCS	LCS	Unit	D	%Rec	Limits		
	Added	Result	Qualifier						
Benzene	0.100	0.1026		mg/Kg		103	70 - 130		
Toluene	0.100	0.08447		mg/Kg		84	70 - 130		
Ethylbenzene	0.100	0.09191		mg/Kg		92	70 - 130		
m-Xylene & p-Xylene	0.200	0.1935		mg/Kg		97	70 - 130		
o-Xylene	0.100	0.1003		mg/Kg		100	70 - 130		
Surrogate	LCS	LCS	%Recovery	Qualifier	Limits				
	Result	Qualifier							
4-Bromofluorobenzene (Surr)	101		70 - 130						
1,4-Difluorobenzene (Surr)	112		70 - 130						

Lab Sample ID: LCSD 880-124032/2-A

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Spikes	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	Limit
	Added	Result	Qualifier						
Benzene	0.100	0.1047		mg/Kg		105	70 - 130	2	35
Toluene	0.100	0.08753		mg/Kg		88	70 - 130	4	35
Ethylbenzene	0.100	0.09676		mg/Kg		97	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2043		mg/Kg		102	70 - 130	5	35
o-Xylene	0.100	0.1056		mg/Kg		106	70 - 130	5	35
Surrogate	LCSD	LCSD	%Recovery	Qualifier	Limits				
	Result	Qualifier							
4-Bromofluorobenzene (Surr)	102		70 - 130						
1,4-Difluorobenzene (Surr)	114		70 - 130						

Lab Sample ID: 890-9054-A-1-D MS

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Sample	Sample	Spikes	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00200	U	0.100	0.09914		mg/Kg		99	70 - 130
Toluene	<0.00200	U	0.100	0.08444		mg/Kg		84	70 - 130

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
SDG: 03C1558768

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

Lab Sample ID: 890-9054-A-1-D MS

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Ethylbenzene	<0.00200	U	0.100	0.09352		mg/Kg	94	70 - 130	
m-Xylene & p-Xylene	<0.00399	U	0.200	0.1971		mg/Kg	99	70 - 130	
o-Xylene	<0.00200	U	0.100	0.09938		mg/Kg	99	70 - 130	

Surrogate	MS	MS	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	110		70 - 130		
1,4-Difluorobenzene (Surr)	109		70 - 130		

Lab Sample ID: 890-9054-A-1-E MSD

Matrix: Solid

Analysis Batch: 124020

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 124032

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.00200	U	0.100	0.1062		mg/Kg	106	70 - 130	
Toluene	<0.00200	U	0.100	0.08674		mg/Kg	87	70 - 130	3
Ethylbenzene	<0.00200	U	0.100	0.09450		mg/Kg	95	70 - 130	1
m-Xylene & p-Xylene	<0.00399	U	0.200	0.2029		mg/Kg	101	70 - 130	3
o-Xylene	<0.00200	U	0.100	0.1024		mg/Kg	102	70 - 130	3

Surrogate	MSD	MSD	%Recovery	Qualifier	Limits
	Recovery	Qualifier			
4-Bromofluorobenzene (Surr)	98		70 - 130		
1,4-Difluorobenzene (Surr)	121		70 - 130		

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

Lab Sample ID: MB 880-123663/1-A

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 123663

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	11/11/25 10:38	11/14/25 06:09		1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg	11/11/25 10:38	11/14/25 06:09		1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg	11/11/25 10:38	11/14/25 06:09		1

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Recovery	Qualifier						
1-Chlorooctane	96		70 - 130			11/11/25 10:38	11/14/25 06:09	1
o-Terphenyl	115		70 - 130			11/11/25 10:38	11/14/25 06:09	1

Lab Sample ID: LCS 880-123663/2-A

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123663

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
	Added	Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	881.7		mg/Kg	88	70 - 130	
Diesel Range Organics (Over C10-C28)	1000	808.5		mg/Kg	81	70 - 130	

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
SDG: 03C1558768

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

Lab Sample ID: LCS 880-123663/2-A

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 123663

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
<i>o</i> -Terphenyl	101		70 - 130

Lab Sample ID: LCSD 880-123663/3-A

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 123663

Analyte		Spike	LCSD	LCSD			%Rec	RPD
		Added	Result	Qualifier	Unit	D	Rec	Limit
Gasoline Range Organics (GRO)-C6-C10		1000	868.9		mg/Kg		87	70 - 130
Diesel Range Organics (Over C10-C28)		1000	821.1		mg/Kg		82	70 - 130
							2	20
<i>Surrogate</i>	<i>LCS</i>	<i>LCS</i>						
	%Recovery	Qualifier	Limits					
1-Chlorooctane	81		70 - 130					
<i>o</i> -Terphenyl	100		70 - 130					

Lab Sample ID: 890-9052-A-16-C MS

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 123663

Analyte	Sample	Sample	Spike	MS	MS		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	Rec
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	806.4		mg/Kg		81
Diesel Range Organics (Over C10-C28)	<50.0	U	998	767.8		mg/Kg		77
<i>Surrogate</i>	<i>MS</i>	<i>MS</i>						
	%Recovery	Qualifier	Limits					
1-Chlorooctane	74		70 - 130					
<i>o</i> -Terphenyl	92		70 - 130					

Lab Sample ID: 890-9052-A-16-D MSD

Matrix: Solid

Analysis Batch: 124027

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 123663

Analyte	Sample	Sample	Spike	MSD	MSD		%Rec	
	Result	Qualifier	Added	Result	Qualifier	Unit	D	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	808.0		mg/Kg		0
Diesel Range Organics (Over C10-C28)	<50.0	U	998	772.6		mg/Kg		20
<i>Surrogate</i>	<i>MSD</i>	<i>MSD</i>						
	%Recovery	Qualifier	Limits					
1-Chlorooctane	73		70 - 130					
<i>o</i> -Terphenyl	93		70 - 130					

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## QC Sample Results

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATIONJob ID: 890-9053-1  
SDG: 03C1558768

## Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-123611/1-A

Matrix: Solid

Analysis Batch: 123814

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Chloride	<10.0	U	10.0	mg/Kg			11/13/25 01:15	1

Lab Sample ID: LCS 880-123611/2-A

Matrix: Solid

Analysis Batch: 123814

Analyte	Spike Added	LC	LC	Unit	D	%Rec	Limits	RPD
		Result	Qualifier					
Chloride	250	239.9		mg/Kg		96	90 - 110	

Lab Sample ID: LCSD 880-123611/3-A

Matrix: Solid

Analysis Batch: 123814

Analyte	Spike Added	LCSD	LCSD	Unit	D	%Rec	Limits	RPD
		Result	Qualifier					
Chloride	250	241.0		mg/Kg		96	90 - 110	0

Lab Sample ID: 890-9052-A-14-B MS

Matrix: Solid

Analysis Batch: 123814

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	1200		248	1443	4	mg/Kg		98	90 - 110	

Lab Sample ID: 890-9052-A-14-C MSD

Matrix: Solid

Analysis Batch: 123814

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier					
Chloride	1200		248	1452	4	mg/Kg		102	90 - 110	1

Client Sample ID: Matrix Spike  
Prep Type: SolubleClient Sample ID: Matrix Spike Duplicate  
Prep Type: Soluble

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## QC Association Summary

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

## GC VOA

## Analysis Batch: 124020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	8021B	124032
890-9053-2	SS 02	Total/NA	Solid	8021B	124032
890-9053-3	SS 03	Total/NA	Solid	8021B	124032
890-9053-4	SS 04	Total/NA	Solid	8021B	124032
890-9053-5	SS 05	Total/NA	Solid	8021B	124032
890-9053-6	SS 06	Total/NA	Solid	8021B	124032
MB 880-124032/5-A	Method Blank	Total/NA	Solid	8021B	124032
LCS 880-124032/1-A	Lab Control Sample	Total/NA	Solid	8021B	124032
LCSD 880-124032/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	124032
890-9054-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	124032
890-9054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	124032

## Prep Batch: 124032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	5035	11
890-9053-2	SS 02	Total/NA	Solid	5035	12
890-9053-3	SS 03	Total/NA	Solid	5035	13
890-9053-4	SS 04	Total/NA	Solid	5035	14
890-9053-5	SS 05	Total/NA	Solid	5035	
890-9053-6	SS 06	Total/NA	Solid	5035	
MB 880-124032/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-124032/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-124032/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-9054-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-9054-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

## Analysis Batch: 124092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	Total BTEX	
890-9053-2	SS 02	Total/NA	Solid	Total BTEX	
890-9053-3	SS 03	Total/NA	Solid	Total BTEX	
890-9053-4	SS 04	Total/NA	Solid	Total BTEX	
890-9053-5	SS 05	Total/NA	Solid	Total BTEX	
890-9053-6	SS 06	Total/NA	Solid	Total BTEX	

## GC Semi VOA

## Prep Batch: 123663

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	8015NM Prep	
890-9053-2	SS 02	Total/NA	Solid	8015NM Prep	
890-9053-3	SS 03	Total/NA	Solid	8015NM Prep	
890-9053-4	SS 04	Total/NA	Solid	8015NM Prep	
890-9053-5	SS 05	Total/NA	Solid	8015NM Prep	
890-9053-6	SS 06	Total/NA	Solid	8015NM Prep	
MB 880-123663/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-123663/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-123663/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-9052-A-16-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-9052-A-16-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

## QC Association Summary

Client: Ensolum  
Project/Site: 1ST SPINE BOOSTER STATIONJob ID: 890-9053-1  
SDG: 03C1558768

## GC Semi VOA

## Analysis Batch: 124027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	8015B NM	123663
890-9053-2	SS 02	Total/NA	Solid	8015B NM	123663
890-9053-3	SS 03	Total/NA	Solid	8015B NM	123663
890-9053-4	SS 04	Total/NA	Solid	8015B NM	123663
890-9053-5	SS 05	Total/NA	Solid	8015B NM	123663
890-9053-6	SS 06	Total/NA	Solid	8015B NM	123663
MB 880-123663/1-A	Method Blank	Total/NA	Solid	8015B NM	123663
LCS 880-123663/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	123663
LCSD 880-123663/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	123663
890-9052-A-16-C MS	Matrix Spike	Total/NA	Solid	8015B NM	123663
890-9052-A-16-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	123663

## Analysis Batch: 124161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Total/NA	Solid	8015 NM	11
890-9053-2	SS 02	Total/NA	Solid	8015 NM	12
890-9053-3	SS 03	Total/NA	Solid	8015 NM	13
890-9053-4	SS 04	Total/NA	Solid	8015 NM	14
890-9053-5	SS 05	Total/NA	Solid	8015 NM	
890-9053-6	SS 06	Total/NA	Solid	8015 NM	

## HPLC/IC

## Leach Batch: 123611

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Soluble	Solid	DI Leach	
890-9053-2	SS 02	Soluble	Solid	DI Leach	
890-9053-3	SS 03	Soluble	Solid	DI Leach	
890-9053-4	SS 04	Soluble	Solid	DI Leach	
890-9053-5	SS 05	Soluble	Solid	DI Leach	
890-9053-6	SS 06	Soluble	Solid	DI Leach	
MB 880-123611/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-123611/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-123611/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-9052-A-14-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-9052-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

## Analysis Batch: 123814

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-9053-1	SS 01	Soluble	Solid	300.0	123611
890-9053-2	SS 02	Soluble	Solid	300.0	123611
890-9053-3	SS 03	Soluble	Solid	300.0	123611
890-9053-4	SS 04	Soluble	Solid	300.0	123611
890-9053-5	SS 05	Soluble	Solid	300.0	123611
890-9053-6	SS 06	Soluble	Solid	300.0	123611
MB 880-123611/1-A	Method Blank	Soluble	Solid	300.0	123611
LCS 880-123611/2-A	Lab Control Sample	Soluble	Solid	300.0	123611
LCSD 880-123611/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	123611
890-9052-A-14-B MS	Matrix Spike	Soluble	Solid	300.0	123611
890-9052-A-14-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	123611

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## Lab Chronicle

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

## Client Sample ID: SS 01

Date Collected: 11/07/25 10:56

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9053-1

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	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 13:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 13:18	SA	EET MID
Total/NA	Analysis	8015 NM		1			124161	11/14/25 10:03	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 10:03	FC	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:02	CS	EET MID

## Client Sample ID: SS 02

Date Collected: 11/07/25 10:57

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9053-2

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	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 13:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 13:38	SA	EET MID
Total/NA	Analysis	8015 NM		1			124161	11/14/25 10:18	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 10:18	FC	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:07	CS	EET MID

## Client Sample ID: SS 03

Date Collected: 11/07/25 11:28

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9053-3

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			5.03 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 13:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 13:59	SA	EET MID
Total/NA	Analysis	8015 NM		1			124161	11/14/25 10:34	SA	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 10:34	FC	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:25	CS	EET MID

## Client Sample ID: SS 04

Date Collected: 11/07/25 11:13

Date Received: 11/07/25 16:59

## Lab Sample ID: 890-9053-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 14:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 14:19	SA	EET MID

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## Lab Chronicle

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

## Client Sample ID: SS 04

Lab Sample ID: 890-9053-4

Matrix: Solid

Date Collected: 11/07/25 11:13  
 Date Received: 11/07/25 16:59

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			124161	11/14/25 10:49	SA	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 10:49	FC	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:31	CS	EET MID

## Client Sample ID: SS 05

Lab Sample ID: 890-9053-5

Matrix: Solid

Date Collected: 11/07/25 11:29  
 Date Received: 11/07/25 16:59

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	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 14:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 14:40	SA	EET MID
Total/NA	Analysis	8015 NM		1			124161	11/14/25 11:05	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 11:05	FC	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:37	CS	EET MID

## Client Sample ID: SS 06

Lab Sample ID: 890-9053-6

Matrix: Solid

Date Collected: 11/07/25 12:12  
 Date Received: 11/07/25 16:59

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	124032	11/14/25 09:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	124020	11/14/25 15:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			124092	11/14/25 15:00	SA	EET MID
Total/NA	Analysis	8015 NM		1			124161	11/14/25 11:20	SA	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10.00 mL	123663	11/11/25 10:38	EL	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	124027	11/14/25 11:20	FC	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	123611	11/10/25 16:26	SA	EET MID
Soluble	Analysis	300.0		1			123814	11/13/25 02:43	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: 890-9053-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

### **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

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**Method Summary**

Client: Ensolum  
 Project/Site: 1ST SPINE BOOSTER STATION

Job ID: 890-9053-1  
 SDG: 03C1558768

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

Job ID: 890-9053-1

Project/Site: 1ST SPINE BOOSTER STATION

SDG: 03C1558768

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-9053-1	SS 01	Solid	11/07/25 10:56	11/07/25 16:59	SURFACE	1
890-9053-2	SS 02	Solid	11/07/25 10:57	11/07/25 16:59	SURFACE	2
890-9053-3	SS 03	Solid	11/07/25 11:28	11/07/25 16:59	SURFACE	3
890-9053-4	SS 04	Solid	11/07/25 11:13	11/07/25 16:59	SURFACE	4
890-9053-5	SS 05	Solid	11/07/25 11:29	11/07/25 16:59	SURFACE	5
890-9053-6	SS 06	Solid	11/07/25 12:12	11/07/25 16:59	SURFACE	6

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Eurofins Carlsbad





## Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-9053-1

SDG Number: 03C1558768

**Login Number: 9053****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: 890-9053-1

SDG Number: 03C1558768

**Login Number: 9053****List Source: Eurofins Midland****List Number: 2****List Creation: 11/11/25 08:21 AM****Creator: Lee, Randall**

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		



## APPENDIX F

### Spill Volume Calculation

<b>Location:</b>	<b>1st Spine Booster</b>	
<b>Spill Date:</b>	<b>10/22/2025</b>	
<b>Incident #:</b>	<b>nAPP2529655909</b>	
<b>Area 1</b>		
Approximate Area =	1409	sq. ft.
Average Saturation (or depth) of spill =	0.25	inches
Average Porosity Factor =	0.2	
<b>VOLUME OF LEAK</b>		
Total Crude Oil =		bbls
Total Produced Water =	1.05	bbls
<b>Area 2</b>		
Approximate Area =	1543	sq. ft.
Average Saturation (or depth) of spill =	0.1	inches
<b>VOLUME OF LEAK</b>		
Total Crude Oil =		bbls
Total Produced Water =	40	bbls
<b>TOTAL VOLUME OF LEAK</b>		
Total Crude Oil =		bbls
Total Produced Water =	41.05	bbls
<b>TOTAL VOLUME RECOVERED</b>		
Total Crude Oil =		bbls
Total Produced Water =	40	bbls

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

General Information  
Phone: (505) 629-6116

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

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

QUESTIONS

Action 519629

**QUESTIONS**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 519629
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2529655909
Incident Name	NAPP2529655909 1ST SPINE BOOSTER @ N-02-25S-30E
Incident Type	Produced Water Release
Incident Status	Initial C-141 Received

**Location of Release Source**

*Please answer all the questions in this group.*

Site Name	1st Spine Booster
Date Release Discovered	10/22/2025
Surface Owner	State

**Incident Details**

*Please answer all the questions in this group.*

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

**Nature and Volume of Release**

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

Crude Oil Released (bbls) Details	<i>Not answered.</i>
Produced Water Released (bbls) Details	<i>Cause: Equipment Failure   Pump   Produced Water   Released: 41 BBL   Recovered: 40 BBL   Lost: 1 BBL.</i>
Is the concentration of chloride in the produced water >10,000 mg/l	<i>Yes</i>
Condensate Released (bbls) Details	<i>Not answered.</i>
Natural Gas Vented (Mcf) Details	<i>Not answered.</i>
Natural Gas Flared (Mcf) Details	<i>Not answered.</i>
Other Released Details	<i>Not answered.</i>
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	<i>This release was totaled at 2,952 square feet, (1,543 square feet of lined containment with 40 bbls of produced water recovered, and 1,231.5 sq feet with a saturation depth of 0.25 inches was released on pre-disturbed pipeline ROW and 177.5 released in undisturbed pasture.</i>

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

QUESTIONS, Page 2

Action 519629

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 519629
	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	Yes
Reasons why this would be considered a submission for a notification of a major release	From paragraph A. "Major release" determine using: (1) an unauthorized release of a volume, excluding gases, of 25 barrels or more.

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

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

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 10/23/2025
--	---

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

QUESTIONS, Page 3

Action 519629

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 519629
	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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**Oil Conservation Division**  
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**Santa Fe, NM 87505**

CONDITIONS

Action 519629

**CONDITIONS**

Operator:	XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
		Action Number: 519629
		Action Type: [C-141] Initial C-141 (C-141-v-Initial)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	None	10/24/2025

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QUESTIONS

Action 544534

**QUESTIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

Prerequisites	
Incident ID (n#)	nAPP2529655909
Incident Name	NAPP2529655909 DOG TOWN DRAW PW BOOSTER @ N-02-25S-30E
Incident Type	Produced Water Release
Incident Status	Remediation Plan Received

**Location of Release Source**

*Please answer all the questions in this group.*

Site Name	DOG TOWN DRAW PW BOOSTER
Date Release Discovered	10/22/2025
Surface Owner	State

**Incident Details**

*Please answer all the questions in this group.*

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

**Nature and Volume of Release**

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

Crude Oil Released (bbls) Details	<i>Not answered.</i>
Produced Water Released (bbls) Details	<i>Cause: Equipment Failure   Pump   Produced Water   Released: 41 BBL   Recovered: 40 BBL   Lost: 1 BBL.</i>
Is the concentration of chloride in the produced water >10,000 mg/l	<i>Yes</i>
Condensate Released (bbls) Details	<i>Not answered.</i>
Natural Gas Vented (Mcf) Details	<i>Not answered.</i>
Natural Gas Flared (Mcf) Details	<i>Not answered.</i>
Other Released Details	<i>Not answered.</i>
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	<i>This release was totaled at 2,952 square feet, (1,543 square feet of lined containment with 40 bbls of produced water recovered, and 1,231.5 sq feet with a saturation depth of 0.25 inches was released on pre-disturbed pipeline ROW and 177.5 released in undisturbed pasture.</i>

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QUESTIONS, Page 2

Action 544534

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

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

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

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

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 01/20/2026
--	---

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QUESTIONS, Page 3

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Action 544534

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS****Site Characterization**

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	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	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1000 (ft.) and $\frac{1}{2}$ (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 $\frac{1}{2}$ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

**Remediation Plan**

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

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
<b>Soil Contamination Sampling:</b> (Provide the highest observable value for each, in milligrams per kilograms.)	
Chloride (EPA 300.0 or SM4500 Cl B)	3820
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	0
GRO+DRO (EPA SW-846 Method 8015M)	0
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	11/07/2025
On what date will (or did) the final sampling or liner inspection occur	04/20/2026
On what date will (or was) the remediation complete(d)	04/20/2026
What is the estimated surface area (in square feet) that will be reclaimed	1398
What is the estimated volume (in cubic yards) that will be reclaimed	150
What is the estimated surface area (in square feet) that will be remediated	1398
What is the estimated volume (in cubic yards) that will be remediated	150

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

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

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QUESTIONS, Page 4

Action 544534

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type:  [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

**Remediation Plan (continued)**

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

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

*(Select all answers below that apply.)*

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	FEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
OR which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
OR is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
OR is the <b>off-site</b> disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 01/20/2026
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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 544534

**QUESTIONS (continued)**

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380 Action Number: 544534 Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)
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**QUESTIONS**

**Deferral Requests Only**

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

Requesting a deferral of the remediation closure due date with the approval of this submission	No
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QUESTIONS, Page 6

Action 544534

**QUESTIONS (continued)**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>545402</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>01/27/2026</b>
What was the (estimated) number of samples that were to be gathered	<b>15</b>
What was the sampling surface area in square feet	<b>3000</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 544534

**CONDITIONS**

Operator:  XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID:  5380
	Action Number:  544534
	Action Type: [C-141] Site Char./Remediation Plan C-141 (C-141-v-Plan)

**CONDITIONS**

Created By	Condition	Condition Date
rhamlet	The Remediation Plan is Conditionally Approved. Please collect confirmation closure samples, representing no more than 200 ft <sup>2</sup> . All samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Floor confirmation samples should be delineated/excavated to meet closure criteria standards from Table 1 of the OCD Spill Rule for site receptor characterization/proven depth to water determination. Please make sure that the edge of the release extent is accurately defined. Sidewall/edge samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. All off-pad areas must meet reclamation standards in the OCD Spill Rule. The work will need to be completed in 90 days after the report has been reviewed.	1/23/2026