

Incident ID	NAPP2223450771
District RP	
Facility ID	
Application ID	

Closure

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

Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
- ☒ Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)
- ☒ Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling)
- ☒ Description of remediation activities

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

Printed Name: Garrett Green Title: SSHE Coordinator

Signature:  Date: 03/06/2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon Date: 03/29/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: Robert Hamlet Date: 8/15/2023

Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced

District I
1625 N. French Dr., Hobbs, NM 88240
District II
811 S. First St., Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural
Resources Department

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised August 24, 2018
Submit to appropriate OCD District office

Incident ID	NAPP2223450771
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Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Garrett Green	Contact Telephone 575-200-0729
Contact email garrett.green@exxonmobil.com	Incident # (assigned by OCD)
Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220	

Location of Release Source

Latitude 32.103710 Longitude -103.831225
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU Brushy Draw 25 Satellite Tank Battery	Site Type Tank battery
Date Release Discovered 8/8/2022	API# (if applicable)

Unit Letter	Section	Township	Range	County
B G	25	25S	30E	Eddy

Surface Owner: ☐ State ☒ Federal ☐ Tribal ☐ Private (Name: _____)

Nature and Volume of Release

Material(s) Released (Select all that apply and attach calculations or specific justification for the volumes provided below)

<input type="checkbox"/> Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
<input type="checkbox"/> Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<input checked="" type="checkbox"/> Condensate	Volume Released (bbls) 0.24	Volume Recovered (bbls) 0.00
<input type="checkbox"/> Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
<input type="checkbox"/> Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)


Cause of Release Drain valve was plugged, causing fluids to exit flare and ignite on grass below. LO was able to extinguish the fire without the use of a fire extinguisher. A third-party operator has been retained for remediation purposes.

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Was this a major release as defined by 19.15.29.7(A) NMAC? <input checked="" type="checkbox"/> Yes No	If YES, for what reason(s) does the responsible party consider this a major release? A release that results in a fire or is the result of a fire.
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Garrett Green to ocd.enviro@state.nm.us, Mike Bratcher, and Robert Hamlet, on 08/08/2022 via email.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury

<input checked="" type="checkbox"/> The source of the release has been stopped.	
<input checked="" type="checkbox"/> The impacted area has been secured to protect human health and the environment.	
<input checked="" type="checkbox"/> Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.	
<input checked="" type="checkbox"/> All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why: NA	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
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.	
Printed Name: Garrett Green	Title: SSHE Coordinator
Signature: 	Date: 8/22/2022
email: garrett.green@exxonmobil.com	Telephone: 575-200-0729
<u>OCD Only</u>	
Received by: Jocelyn Harimon	Date: 08/22/2022

Location:	PLU 25 Brushy Draw Satellite TB	
Spill Date:	8/8/2022	
Area 1		
Approximate Area =	1056.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Condensate =	0.24	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME OF LEAK		
Total Condensate =	0.24	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME RECOVERED		
Total Condensate =	0.00	bbls
Total Produced Water =	0.00	bbls

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 136485

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 136485
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	8/22/2022

Incident ID	NAPP2223450771
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Application ID	

Site Assessment/Characterization

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?	<u>>100</u> (ft bgs)
Did this release impact groundwater or surface water?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within 300 feet of a wetland?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying a subsurface mine?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release overlying an unstable area such as karst geology?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are the lateral extents of the release within a 100-year floodplain?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Did the release impact areas not on an exploration, development, production, or storage site?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.

Characterization Report Checklist: *Each of the following items must be included in the report.*

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods, anticipated timelines for beginning and completing the remediation. The closure criteria for a release are contained in Table 1 of 19.15.29.12 NMAC, however, use of the table is modified by site- and release-specific parameters.

State of New Mexico
Oil Conservation Division

Page 4

Incident ID	NAPP2223450771
District RP	
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Application ID	

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Printed Name: _ Garrett Green _____ Title: _ SSHE Coordinator _____

Signature:  _____ Date: _ 3/6/2023 _____

email: _ garrett.green@exxonmobil.com _____ Telephone: _ 575-200-0729 _____

OCD Only

Received by: _ Jocelyn Harimon _____ Date: _ 03/29/2023 _____

Incident ID	NAPP2223450771
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Closure

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Closure Report Attachment Checklist: *Each of the following items must be included in the closure report.*

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
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- ☒ Description of remediation activities

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Printed Name: Garrett Green Title: SSHE Coordinator

Signature:  Date: 03/06/2023

email: garrett.green@exxonmobil.com Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon Date: 03/29/2023

Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



March 6, 2023

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

**Re: Revised Closure Request
PLU Brushy Draw 25 Satellite Tank Battery
Incident Number NAPP2223450771
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Revised Closure Request* to update information pertaining to site assessment and soil sampling activities at the PLU Brushy Draw 25 Satellite Tank Battery (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of condensate and flare fire at the Site. An original report dated November 4, 2022 was denied by the New Mexico Oil Conservation Division (NMOCD) based on sample temperature. Following additional discussion and as instructed by the NMOCD, XTO is submitting this *Revised Closure Request* for Incident Number NAPP2223450771.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit G, Section 25, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.103710°N, 103.831225°W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On August 8, 2022, a drain valve was plugged causing approximately 0.24 barrels (bbls) of condensate to exit the flare and ignite. The flare fire reached the edge of the well pad causing pasture grasses to also ignite. There were no fluids to recover, and the fire extinguished without use of a fire extinguisher. XTO immediately reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on August 8, 2022 and submitted a Release Notification Form C-141 (Form C-141) on August 22, 2022. The release was assigned Incident Number NAPP2223450771.

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 on page 3 of the Form C-141, Site Assessment/Characterization.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on a recent soil boring drilled for determination of regional groundwater depth. On February 24, 2021, a soil boring (C-4498) was drilled approximately 0.5 miles southwest of the Site utilizing a truck-mounted hollow-stem auger rig. Soil boring C-4498 was drilled to a depth of 109 feet bgs. A field

XTO Energy, Inc
Closure Request
PLU Brushy Draw 25 Satellite Tank Battery

geologist logged and described soils continuously. No moisture or groundwater was encountered during drilling activities. The borehole was left open for over 72 hours to allow for potential slow infill of groundwater. After the 72-hour waiting period without observing groundwater, it was confirmed that groundwater beneath the Site is greater than 109 feet bgs. The borehole was properly abandoned with drill cuttings and hydrated bentonite chips. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 768 feet south 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 from 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 (medium potential karst designation area). Potential site receptors are identified on Figure 1.

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 TPH was applied within the top 4 feet in the pasture area of where the release extent occurred.

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On October 3, 2022, site assessment and delineation activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Ensolum personnel advanced three boreholes (BH01 through BH03) via hand auger to assess the vertical and lateral extent of the release. Two discrete delineation soil samples were collected from each borehole at depths of 0.5 feet bgs and 1-foot bgs. The delineation 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 delineation soil samples were logged on lithologic soil sampling logs, which are included in Appendix B. The release extent and 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 C.

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 Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following constituents of concern (COC): 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. The soil samples were submitted to Eurofins within hours of collection and had not fully equilibrated to the 6 degrees Celcius required for shipment and long-term storage. However, the soil samples were considered to have been received in acceptable condition by the receiving laboratory.

XTO Energy, Inc
Closure Request
PLU Brushy Draw 25 Satellite Tank Battery

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for all delineation soil samples (BH01/BH01A through BH03/BH03A) indicated COC concentrations are in compliance with the Site Closure Criteria and the reclamation requirement applied in the top 4 feet of off-pad areas. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Appendix D. NMOCD notifications for the sampling events are included in Appendix E.

CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to assess for the presence or absence of impacted soil from the August 8, 2022 release of condensate and flare fire. Laboratory analytical results for all delineation soil samples indicated COC concentrations were in compliance with the Site Closure Criteria and the reclamation requirement.

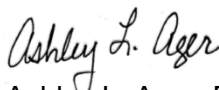
Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. Based on laboratory analytical results compliant with Closure Criteria, no further remediation was required. In addition, XTO has discussed this release and sample temperatures with Mr. Robert Hamlet to confirm the laboratory analytical reports are acceptable in this instance based on relatively low concentrations of TPH detected. As such, XTO respectfully requests closure for Incident Number NAPP2223450771.

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

Sincerely,
Ensolum, LLC



Tacoma Morrissey
Senior Geologist



Ashley L. Ager, P.G.
Program Director

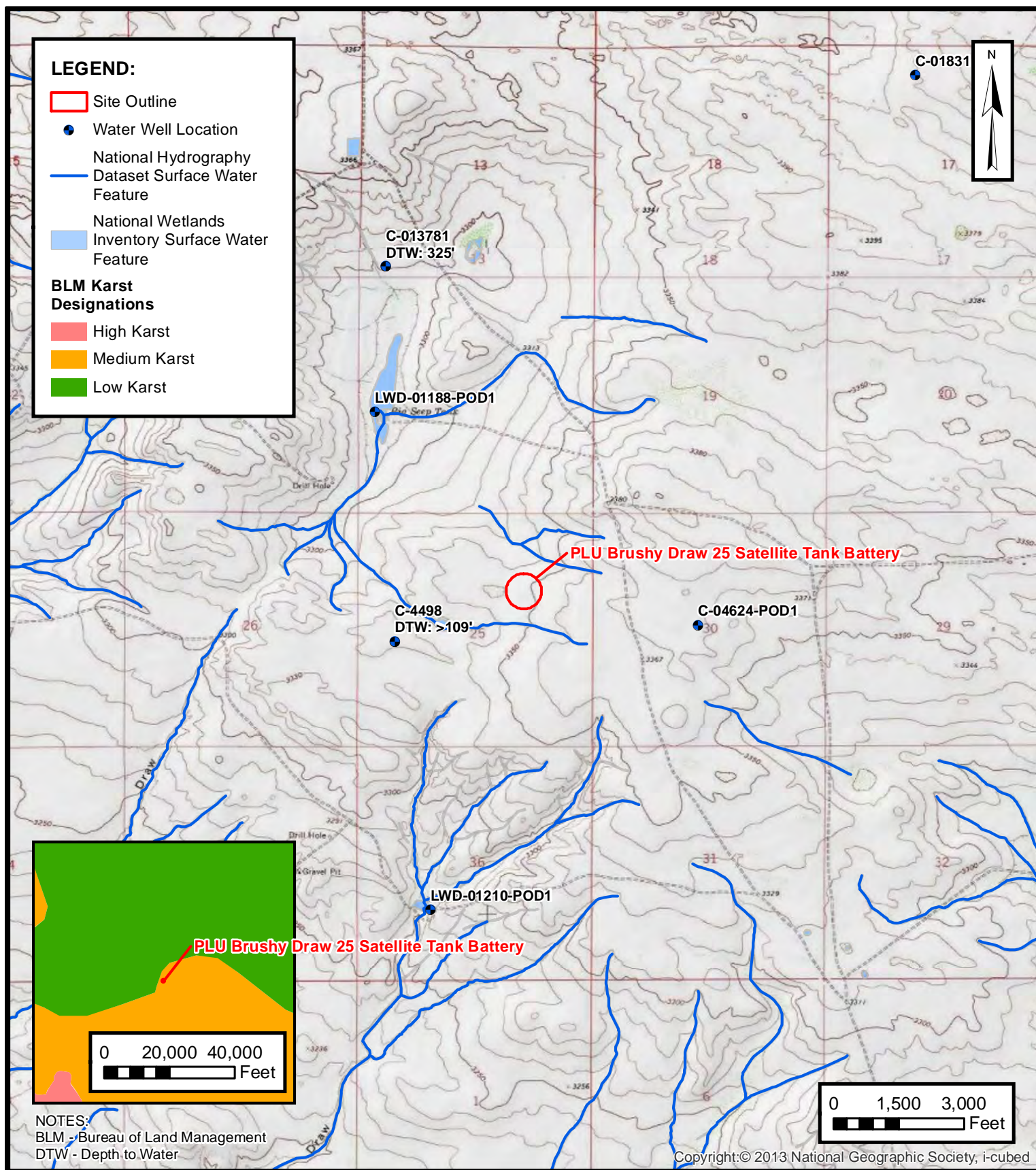
cc: Garrett Green, XTO
Shelby Pennington, XTO
Bureau of Land Management

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	Lithology Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Notifications

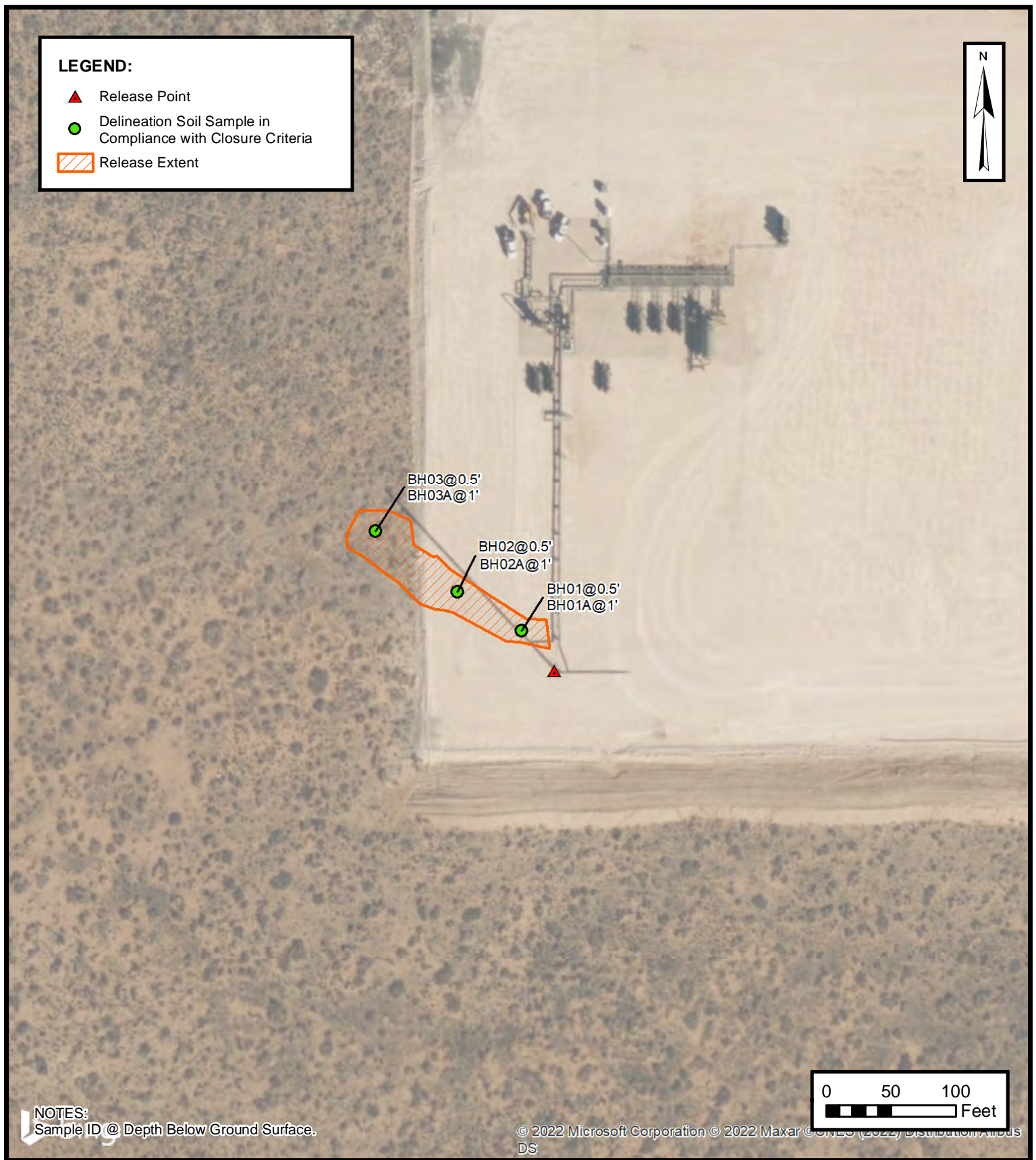


FIGURES

**SITE RECEPTOR MAP**

XTO ENERGY, INC
 PLU BRUSHY DRAW 25 SATELLITE TANK BATTERY
 NAPP2223450771
 Unit G, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE**1**



DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
 PLU BRUSHY DRAW 25 SATELLITE TANK BATTERY
 NAPP2223450771
 Unit G, Sec 25, T25S, R30E
 Eddy County, New Mexico

FIGURE

2



TABLES



TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU Brushy Draw 25 Satellite Tank Battery
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
BH01	10/03/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	35.4
BH01A	10/03/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	95.1
BH02	10/03/2022	0.5	<0.00199	<0.00398	<50.0	86.4	<50.0	86.4	86.4	29.6
BH02A	10/03/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	30.1
BH03	10/03/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	23.2
BH03A	10/03/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	17.2

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 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER


www.ose.state.nm.us

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4498			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	DEGREES LATITUDE 32°	MINUTES 6'	SECONDS 1.96" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND			
		LONGITUDE -103°	50'	26.19" W	* DATUM REQUIRED: WGS 84			
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE NW SW NE Sec. 25 T25S R30E								
2. DRILLING & CASING INFORMATION	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 02/24/2021	DRILLING ENDED 02/24/2021	DEPTH OF COMPLETED WELL (FT) temporary well material		BORE HOLE DEPTH (FT) 109	DEPTH WATER FIRST ENCOUNTERED (FT) n/a		
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)					STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a		
	DRILLING FLUID: <input type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	109	±6.5	Boring- HSA	--	--	--	--
3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

FOR OSE INTERNAL USE

WR-20 WELL RECORD & LOG (Version 06/30/17)

FILE NO. C- 4498	POD NO. 1	TRN NO. 682528
LOCATION 132 T25S R30E Sec 25	WELL TAG ID NO. NA	PAGE 1 OF 2

	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER- BEARING ZONES (gpm)	
	FROM	TO					
4. HYDROGEOLOGIC LOG OF WELL	0	34	34	Caliche, tan, no odor, no stain, gravel, dry	Y ✓ N		
	34	40	6	sand/ caliche, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N		
	40	56	16	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N		
	56	72	16	sandstone, low consolidation, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N		
	72	79	7	sand, tan, no odor, no stain, m-f grain, well sorted, dry	Y ✓ N		
	79	109	30	sandstone, low - medium consolidation, tan, no odor, m-f grained, well sorted, m	Y ✓ N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
					Y N		
	METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	
	5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.				
MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist. <div style="text-align: right;">USE DIT MAR 11 2021 PM 4:26</div>							
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge							
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:						
	 SIGNATURE OF DRILLER / PRINT SIGNEE NAME			Jackie D. Atkins DATE			

FOR OSE INTERNAL USE


WR-20 WELL RECORD & LOG (Version 06/30/2017)


FILE NO. C-4498	POD NO. 1	TRN NO. 682528
LOCATION 132 T255 R30E Sec 25	WELL TAG ID NO. NA	PAGE 2 OF 2




APPENDIX B

Lithologic Soil Sampling Logs

								Sample Name: BH01		Date: 10/3/22	
								Site Name: PLU 25 BD Satellite Battery			
								Incident Number: NAPP2223450771			
								Job Number: 03E1558113			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Kase Parker		Method: Hand Auger	
Coordinates: 32.103710, -103.831225								Hole Diameter: ~4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% error factor is included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
M	<168	0.1	N	BH01	0.5'	0	CCHE	0 -1', CALICHE with silt and gravel, moist, brown, no stain and odor.			
M	<168	0.0	N	BH01A	1'	1					

 ENSOLUM								Sample Name: BH02		Date: 10/3/22	
								Site Name: PLU 25 BD Satellite Battery			
								Incident Number: NAPP2223450771			
								Job Number: 03E1558113			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Kase Parker		Method: Hand Auger	
Coordinates: 32.103710, -103.831225								Hole Diameter: ~4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% error factor is included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
M	<168	0.0	N	BH02	0.5'	0	CCHE	0 - 1', CALICHE with silt and gravel, moist, brown, no stain, no odor.			
M	<168	0.0	N	BH02A	1'	1					

								Sample Name: BH03		Date: 10/3/22	
								Site Name: PLU 25 BD Satellite Battery			
								Incident Number: NAPP2223450771			
								Job Number: 03E1558113			
LITHOLOGIC / SOIL SAMPLING LOG								Logged By: Kase Parker		Method: Hand Auger	
Coordinates: 32.103710, -103.831225								Hole Diameter: ~4"		Total Depth: 1'	
Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. A 40% error factor is included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions			
M	<168	0.0	N	BH03	0.5'	0	SP	0 - 1', SAND, moist, brown, fine grain, poorly graded, no stain and odor.			
M	<168	0.0	N	BH03A	1'	1					



APPENDIX C

Photographic Log



Photographic Log

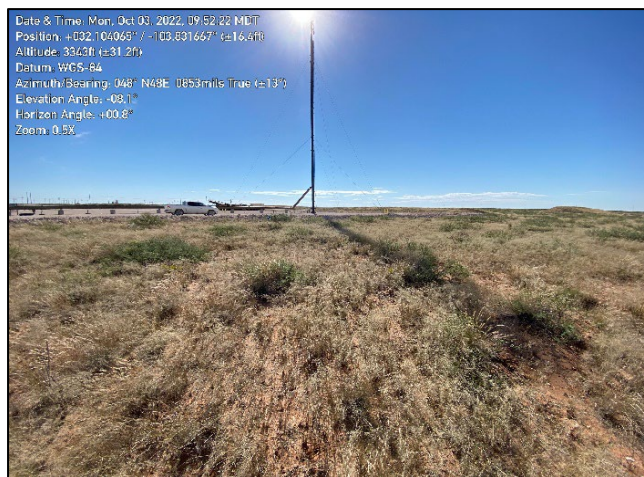
XTO Energy, Inc.

PLU Brushy Draw 25 Satellite Tank Battery

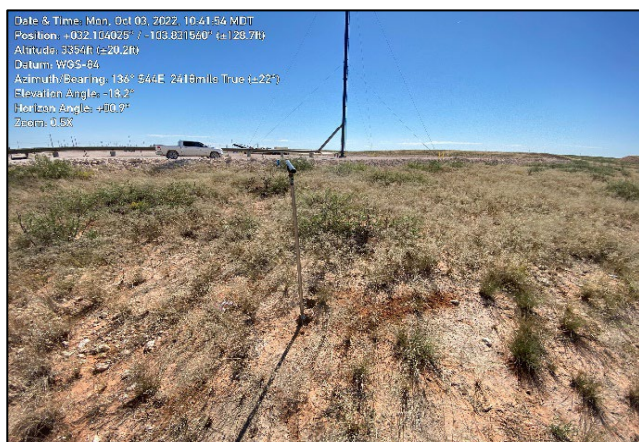
Incident Number NAPP2223450771



Photograph: 1 Date: 9/28/2022
Description: Release extent area on pad
View: Southeast



Photograph: 2 Date: 10/3/2022
Description: Release extent area in pasture
View: Southeast



Photograph: 3 Date: 10/3/2022
Description: Delineation and sampling activities
View: Southeast



Photograph: 4 Date: 10/3/2022
Description: Delineation and sampling activities
View: Southeast



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing America

ANALYTICAL REPORT

Eurofins Carlsbad
1089 N Canal St.
Carlsbad, NM 88220
Tel: (575)988-3199

Laboratory Job ID: 890-3133-1

Laboratory Sample Delivery Group: 03E1558113
Client Project/Site: PLU 25 BD Satellite Battery
Revision: 1

For:

Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

Authorized for release by:
10/12/2022 11:50:19 AM

Jessica Kramer, Project Manager
(432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project
results through



Have a Question?



Visit us at:

www.eurofinsus.com/Env

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Laboratory Job ID: 890-3133-1
SDG: 03E1558113

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	17
Lab Chronicle	20
Certification Summary	22
Method Summary	23
Sample Summary	24
Chain of Custody	25
Receipt Checklists	26

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

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

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
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.
α	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/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Job ID: 890-3133-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3133-1

REVISION

The report being provided is a revision of the original report sent on 10/11/2022. The report (revision 1) is being revised due to Per client email, requesting TPH re run.

Report revision history

Receipt

The samples were received on 10/3/2022 3:37 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 19.0°C

Receipt Exceptions

The following samples analyzed for method <FRACTION_METHOD> were received and analyzed from an unpreserved bulk soil jar: BH01 (890-3133-1), BH01A (890-3133-2), BH02 (890-3133-3), BH02A (890-3133-4), BH03 (890-3133-5) and BH03A (890-3133-6). SAMPLES RECEIVED IN UNPRESERVED BULK SOLID

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36587 and analytical batch 880-36501 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-36186 and analytical batch 880-36113 was outside the upper control limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-36705 and analytical batch 880-36635 was outside the upper control limits.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH01

Lab Sample ID: 890-3133-1

Date Collected: 10/03/22 10:00

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 0.5

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		10/10/22 13:15	10/11/22 04:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 04:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 04:26	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 04:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 04:26	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 04:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130	10/10/22 13:15	10/11/22 04:26	1
1,4-Difluorobenzene (Surr)	75		70 - 130	10/10/22 13:15	10/11/22 04:26	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			10/11/22 09:03	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			10/06/22 11:00	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		10/05/22 14:06	10/06/22 02:56	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 02:56	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 02:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130	10/05/22 14:06	10/06/22 02:56	1
o-Terphenyl	117		70 - 130	10/05/22 14:06	10/06/22 02:56	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.4		4.96	mg/Kg			10/06/22 18:53	1

Client Sample ID: BH01A

Lab Sample ID: 890-3133-2

Date Collected: 10/03/22 10:05

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 1

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		10/10/22 13:15	10/11/22 04:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 04:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 04:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 04:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 04:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 04:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	291	S1+	70 - 130	10/10/22 13:15	10/11/22 04:47	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH01A

Lab Sample ID: 890-3133-2

Date Collected: 10/03/22 10:05

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 1

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	221	S1+	70 - 130	10/10/22 13:15	10/11/22 04:47	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			10/11/22 09:03	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			10/06/22 11:00	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		10/05/22 14:06	10/06/22 03:17	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/06/22 03:17	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/06/22 03:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			10/05/22 14:06	10/06/22 03:17	1
o-Terphenyl	100		70 - 130			10/05/22 14:06	10/06/22 03:17	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	95.1		5.01	mg/Kg			10/06/22 19:11	1

Client Sample ID: BH02

Lab Sample ID: 890-3133-3

Date Collected: 10/03/22 10:10

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 0.5

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		10/10/22 13:15	10/11/22 05:07	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:07	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:07	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 05:07	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:07	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 05:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130	10/10/22 13:15	10/11/22 05:07	1
1,4-Difluorobenzene (Surr)	83		70 - 130	10/10/22 13:15	10/11/22 05:07	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			10/11/22 09:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	86.4		50.0	mg/Kg			10/06/22 11:00	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH02

Date Collected: 10/03/22 10:10

Date Received: 10/03/22 15:37

Sample Depth: 0.5

Lab Sample ID: 890-3133-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/11/22 17:37	10/12/22 03:56	1
Diesel Range Organics (Over C10-C28)	86.4		50.0	mg/Kg		10/11/22 17:37	10/12/22 03:56	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/11/22 17:37	10/12/22 03:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			10/11/22 17:37	10/12/22 03:56	1
o-Terphenyl	77		70 - 130			10/11/22 17:37	10/12/22 03:56	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29.6		4.98	mg/Kg			10/06/22 19:17	1

Client Sample ID: BH02A

Date Collected: 10/03/22 10:15

Date Received: 10/03/22 15:37

Sample Depth: 1

Lab Sample ID: 890-3133-4

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		10/10/22 13:15	10/11/22 05:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 05:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 05:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 05:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 05:28	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 05:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	127		70 - 130			10/10/22 13:15	10/11/22 05:28	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/10/22 13:15	10/11/22 05:28	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			10/11/22 09:03	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			10/06/22 11:00	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		10/05/22 14:06	10/06/22 04:00	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 04:00	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 04:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			10/05/22 14:06	10/06/22 04:00	1
o-Terphenyl	101		70 - 130			10/05/22 14:06	10/06/22 04:00	1

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Client Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH02A

Lab Sample ID: 890-3133-4

Date Collected: 10/03/22 10:15

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30.1		4.97	mg/Kg			10/06/22 19:23	1

Client Sample ID: BH03

Lab Sample ID: 890-3133-5

Date Collected: 10/03/22 10:20

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 0.5

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		10/10/22 13:15	10/11/22 05:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 05:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:15	10/11/22 05:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/10/22 13:15	10/11/22 05:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	126		70 - 130			10/10/22 13:15	10/11/22 05:49	1
1,4-Difluorobenzene (Surr)	102		70 - 130			10/10/22 13:15	10/11/22 05:49	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			10/11/22 09:03	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			10/06/22 11:00	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		10/05/22 14:06	10/06/22 04:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 04:21	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/05/22 14:06	10/06/22 04:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			10/05/22 14:06	10/06/22 04:21	1
o-Terphenyl	114		70 - 130			10/05/22 14:06	10/06/22 04:21	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23.2		5.00	mg/Kg			10/06/22 19:28	1

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Client Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH03A

Lab Sample ID: 890-3133-6

Date Collected: 10/03/22 10:25

Matrix: Solid

Date Received: 10/03/22 15:37

Sample Depth: 1

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		10/10/22 13:15	10/11/22 06:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 06:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 06:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 06:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/11/22 06:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/10/22 13:15	10/11/22 06:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130	10/10/22 13:15	10/11/22 06:10	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130	10/10/22 13:15	10/11/22 06:10	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			10/11/22 09:03	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			10/06/22 11:00	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		10/05/22 14:06	10/06/22 04:41	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/06/22 04:41	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/06/22 04:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	10/05/22 14:06	10/06/22 04:41	1
o-Terphenyl	122		70 - 130	10/05/22 14:06	10/06/22 04:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.2		4.99	mg/Kg			10/06/22 19:46	1

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Surrogate Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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)
890-3133-1	BH01	127	75
890-3133-2	BH01A	291 S1+	221 S1+
890-3133-3	BH02	129	83
890-3133-4	BH02A	127	94
890-3133-5	BH03	126	102
890-3133-6	BH03A	115	69 S1-
890-3163-A-1-E MS	Matrix Spike	72	59 S1-
890-3163-A-1-F MSD	Matrix Spike Duplicate	117	95
LCS 880-36587/1-A	Lab Control Sample	93	94
LCSD 880-36587/2-A	Lab Control Sample Dup	93	93
MB 880-36503/5-A	Method Blank	98	86
MB 880-36587/5-A	Method Blank	105	84

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)
880-19973-A-46-C MS	Matrix Spike	71	73
880-19973-A-46-D MSD	Matrix Spike Duplicate	84	85
880-20138-A-11-I MS	Matrix Spike	93	79
880-20138-A-11-J MSD	Matrix Spike Duplicate	94	79
890-3133-1	BH01	101	117
890-3133-2	BH01A	85	100
890-3133-3	BH02	87	77
890-3133-4	BH02A	87	101
890-3133-5	BH03	103	114
890-3133-6	BH03A	109	122
LCS 880-36186/2-A	Lab Control Sample	91	108
LCS 880-36705/2-A	Lab Control Sample	92	94
LCSD 880-36186/3-A	Lab Control Sample Dup	92	108
LCSD 880-36705/3-A	Lab Control Sample Dup	91	89
MB 880-36186/1-A	Method Blank	6 S1-	7 S1-
MB 880-36705/1-A	Method Blank	6 S1-	9 S1-

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36503/5-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36503

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 10:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 10:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 10:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/10/22 08:35	10/10/22 10:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 10:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/10/22 08:35	10/10/22 10:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/10/22 08:35	10/10/22 10:55	1
1,4-Difluorobenzene (Surr)	86		70 - 130	10/10/22 08:35	10/10/22 10:55	1

Lab Sample ID: MB 880-36587/5-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36587

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/10/22 22:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/10/22 22:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/10/22 22:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/10/22 13:15	10/10/22 22:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:15	10/10/22 22:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/10/22 13:15	10/10/22 22:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	10/10/22 13:15	10/10/22 22:54	1
1,4-Difluorobenzene (Surr)	84		70 - 130	10/10/22 13:15	10/10/22 22:54	1

Lab Sample ID: LCS 880-36587/1-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36587

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09350		mg/Kg		93	70 - 130
Toluene	0.100	0.1003		mg/Kg		100	70 - 130
Ethylbenzene	0.100	0.09771		mg/Kg		98	70 - 130
m-Xylene & p-Xylene	0.200	0.2053		mg/Kg		103	70 - 130
o-Xylene	0.100	0.1046		mg/Kg		105	70 - 130

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

Lab Sample ID: LCSD 880-36587/2-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36587

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09306		mg/Kg		93	70 - 130	0	35

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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

Lab Sample ID: LCSD 880-36587/2-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36587

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.09756		mg/Kg		98	70 - 130	3	35
Ethylbenzene	0.100	0.09462		mg/Kg		95	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.1987		mg/Kg		99	70 - 130	3	35
o-Xylene	0.100	0.1013		mg/Kg		101	70 - 130	3	35

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

Lab Sample ID: 890-3163-A-1-E MS

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36587

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U F1 F2	0.0998	0.01619	F1	mg/Kg		16	70 - 130
Toluene	<0.00201	U F1 F2	0.0998	0.02961	F1	mg/Kg		29	70 - 130
Ethylbenzene	<0.00201	U F1 F2	0.0998	0.03554	F1	mg/Kg		36	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.200	0.04898	F1	mg/Kg		25	70 - 130
o-Xylene	<0.00201	U F1 F2	0.0998	0.02925	F1	mg/Kg		29	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	72		70 - 130
1,4-Difluorobenzene (Surr)	59	S1-	70 - 130

Lab Sample ID: 890-3163-A-1-F MSD

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36587

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U F1 F2	0.0996	0.03750	F1 F2	mg/Kg		38	70 - 130	79	35
Toluene	<0.00201	U F1 F2	0.0996	0.05387	F1 F2	mg/Kg		53	70 - 130	58	35
Ethylbenzene	<0.00201	U F1 F2	0.0996	0.05853	F1 F2	mg/Kg		59	70 - 130	49	35
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.199	0.1308	F1 F2	mg/Kg		66	70 - 130	91	35
o-Xylene	<0.00201	U F1 F2	0.0996	0.06767	F1 F2	mg/Kg		68	70 - 130	79	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-36186/1-A

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36186

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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

Lab Sample ID: MB 880-36186/1-A

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36186

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/05/22 14:06	10/05/22 20:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	6	S1-	70 - 130			10/05/22 14:06	10/05/22 20:28	1
o-Terphenyl	7	S1-	70 - 130			10/05/22 14:06	10/05/22 20:28	1

Lab Sample ID: LCS 880-36186/2-A

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36186

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	777.3		mg/Kg		78	70 - 130
Diesel Range Organics (Over C10-C28)	1000	872.8		mg/Kg		87	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
1-Chlorooctane	91		70 - 130				
o-Terphenyl	108		70 - 130				

Lab Sample ID: LCSD 880-36186/3-A

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36186

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	841.3		mg/Kg		84	70 - 130	8	20
Diesel Range Organics (Over C10-C28)	1000	878.3		mg/Kg		88	70 - 130	1	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	108		70 - 130						

Lab Sample ID: 880-19973-A-46-C MS

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36186

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	926.9		mg/Kg		91	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	998	818.6		mg/Kg		82	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
1-Chlorooctane	71		70 - 130						
o-Terphenyl	73		70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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

Lab Sample ID: 880-19973-A-46-D MSD

Matrix: Solid

Analysis Batch: 36113

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36186

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1119		mg/Kg		110	70 - 130	19	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	975.0		mg/Kg		98	70 - 130	17	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1-Chlorooctane	84		70 - 130								
o-Terphenyl	85		70 - 130								

Lab Sample ID: MB 880-36705/1-A

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36705

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/11/22 17:37	10/11/22 20:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/11/22 17:37	10/11/22 20:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/11/22 17:37	10/11/22 20:40	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	6	S1-	70 - 130			10/11/22 17:37	10/11/22 20:40	1
o-Terphenyl	9	S1-	70 - 130			10/11/22 17:37	10/11/22 20:40	1

Lab Sample ID: LCS 880-36705/2-A

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36705

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	820.8		mg/Kg		82	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	948.3		mg/Kg		95	70 - 130		
Surrogate	LCS %Recovery	LCS Qualifier	Limits						
1-Chlorooctane	92		70 - 130						
o-Terphenyl	94		70 - 130						

Lab Sample ID: LCSD 880-36705/3-A

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36705

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	818.4		mg/Kg		82	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	1000	903.0		mg/Kg		90	70 - 130	5	20

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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

Lab Sample ID: LCSD 880-36705/3-A

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36705

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	91		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 880-20138-A-11-I MS

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36705

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	839.4		mg/Kg		84	70 - 130
Diesel Range Organics (Over C10-C28)	124		998	848.3		mg/Kg		73	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	93		70 - 130
o-Terphenyl	79		70 - 130

Lab Sample ID: 880-20138-A-11-J MSD

Matrix: Solid

Analysis Batch: 36635

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36705

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	998	824.1		mg/Kg		83	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	124		998	865.3		mg/Kg		74	70 - 130	2	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	79		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36232/1-A

Matrix: Solid

Analysis Batch: 36312

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/06/22 18:36	1

Lab Sample ID: LCS 880-36232/2-A

Matrix: Solid

Analysis Batch: 36312

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	255.8		mg/Kg		102	90 - 110

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QC Sample Results

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-36232/3-A

Matrix: Solid

Analysis Batch: 36312

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	240.0		mg/Kg		96	90 - 110	6	20

Lab Sample ID: 890-3133-1 MS

Matrix: Solid

Analysis Batch: 36312

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	35.4		248	266.3		mg/Kg		93	90 - 110		

Lab Sample ID: 890-3133-1 MSD

Matrix: Solid

Analysis Batch: 36312

Client Sample ID: BH01

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	35.4		248	284.5		mg/Kg		100	90 - 110	7	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

GC VOA

Analysis Batch: 36501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	8021B	36587
890-3133-2	BH01A	Total/NA	Solid	8021B	36587
890-3133-3	BH02	Total/NA	Solid	8021B	36587
890-3133-4	BH02A	Total/NA	Solid	8021B	36587
890-3133-5	BH03	Total/NA	Solid	8021B	36587
890-3133-6	BH03A	Total/NA	Solid	8021B	36587
MB 880-36503/5-A	Method Blank	Total/NA	Solid	8021B	36503
MB 880-36587/5-A	Method Blank	Total/NA	Solid	8021B	36587
LCS 880-36587/1-A	Lab Control Sample	Total/NA	Solid	8021B	36587
LCSD 880-36587/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36587
890-3163-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	36587
890-3163-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36587

Prep Batch: 36503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36503/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 36587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	5035	
890-3133-2	BH01A	Total/NA	Solid	5035	
890-3133-3	BH02	Total/NA	Solid	5035	
890-3133-4	BH02A	Total/NA	Solid	5035	
890-3133-5	BH03	Total/NA	Solid	5035	
890-3133-6	BH03A	Total/NA	Solid	5035	
MB 880-36587/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36587/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36587/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3163-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3163-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36644

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	Total BTEX	
890-3133-2	BH01A	Total/NA	Solid	Total BTEX	
890-3133-3	BH02	Total/NA	Solid	Total BTEX	
890-3133-4	BH02A	Total/NA	Solid	Total BTEX	
890-3133-5	BH03	Total/NA	Solid	Total BTEX	
890-3133-6	BH03A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 36113

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	8015B NM	36186
890-3133-2	BH01A	Total/NA	Solid	8015B NM	36186
890-3133-4	BH02A	Total/NA	Solid	8015B NM	36186
890-3133-5	BH03	Total/NA	Solid	8015B NM	36186
890-3133-6	BH03A	Total/NA	Solid	8015B NM	36186
MB 880-36186/1-A	Method Blank	Total/NA	Solid	8015B NM	36186
LCS 880-36186/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36186

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QC Association Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

GC Semi VOA (Continued)

Analysis Batch: 36113 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-36186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36186
880-19973-A-46-C MS	Matrix Spike	Total/NA	Solid	8015B NM	36186
880-19973-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36186

Prep Batch: 36186

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	8015NM Prep	
890-3133-2	BH01A	Total/NA	Solid	8015NM Prep	
890-3133-4	BH02A	Total/NA	Solid	8015NM Prep	
890-3133-5	BH03	Total/NA	Solid	8015NM Prep	
890-3133-6	BH03A	Total/NA	Solid	8015NM Prep	
MB 880-36186/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36186/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36186/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19973-A-46-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19973-A-46-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Total/NA	Solid	8015 NM	
890-3133-2	BH01A	Total/NA	Solid	8015 NM	
890-3133-3	BH02	Total/NA	Solid	8015 NM	
890-3133-4	BH02A	Total/NA	Solid	8015 NM	
890-3133-5	BH03	Total/NA	Solid	8015 NM	
890-3133-6	BH03A	Total/NA	Solid	8015 NM	

Analysis Batch: 36635

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-3	BH02	Total/NA	Solid	8015B NM	36705
MB 880-36705/1-A	Method Blank	Total/NA	Solid	8015B NM	36705
LCS 880-36705/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36705
LCSD 880-36705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36705
880-20138-A-11-I MS	Matrix Spike	Total/NA	Solid	8015B NM	36705
880-20138-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36705

Prep Batch: 36705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-3	BH02	Total/NA	Solid	8015NM Prep	
MB 880-36705/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36705/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36705/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20138-A-11-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-20138-A-11-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 36232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Soluble	Solid	DI Leach	
890-3133-2	BH01A	Soluble	Solid	DI Leach	
890-3133-3	BH02	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

HPLC/IC (Continued)

Leach Batch: 36232 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-4	BH02A	Soluble	Solid	DI Leach	
890-3133-5	BH03	Soluble	Solid	DI Leach	
890-3133-6	BH03A	Soluble	Solid	DI Leach	
MB 880-36232/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36232/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36232/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3133-1 MS	BH01	Soluble	Solid	DI Leach	
890-3133-1 MSD	BH01	Soluble	Solid	DI Leach	

Analysis Batch: 36312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3133-1	BH01	Soluble	Solid	300.0	36232
890-3133-2	BH01A	Soluble	Solid	300.0	36232
890-3133-3	BH02	Soluble	Solid	300.0	36232
890-3133-4	BH02A	Soluble	Solid	300.0	36232
890-3133-5	BH03	Soluble	Solid	300.0	36232
890-3133-6	BH03A	Soluble	Solid	300.0	36232
MB 880-36232/1-A	Method Blank	Soluble	Solid	300.0	36232
LCS 880-36232/2-A	Lab Control Sample	Soluble	Solid	300.0	36232
LCSD 880-36232/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36232
890-3133-1 MS	BH01	Soluble	Solid	300.0	36232
890-3133-1 MSD	BH01	Soluble	Solid	300.0	36232

Lab Chronicle

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH01

Lab Sample ID: 890-3133-1

Date Collected: 10/03/22 10:00

Matrix: Solid

Date Received: 10/03/22 15:37

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	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 04:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 02:56	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 18:53	CH	EET MID

Client Sample ID: BH01A

Lab Sample ID: 890-3133-2

Date Collected: 10/03/22 10:05

Matrix: Solid

Date Received: 10/03/22 15:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 04:47	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 03:17	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 19:11	CH	EET MID

Client Sample ID: BH02

Lab Sample ID: 890-3133-3

Date Collected: 10/03/22 10:10

Matrix: Solid

Date Received: 10/03/22 15:37

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	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 05:07	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	36705	10/11/22 17:37	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36635	10/12/22 03:56	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 19:17	CH	EET MID

Client Sample ID: BH02A

Lab Sample ID: 890-3133-4

Date Collected: 10/03/22 10:15

Matrix: Solid

Date Received: 10/03/22 15:37

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	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 05:28	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Client Sample ID: BH02A

Lab Sample ID: 890-3133-4

Date Collected: 10/03/22 10:15

Matrix: Solid

Date Received: 10/03/22 15:37

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			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 04:00	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 19:23	CH	EET MID

Client Sample ID: BH03

Lab Sample ID: 890-3133-5

Date Collected: 10/03/22 10:20

Matrix: Solid

Date Received: 10/03/22 15:37

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 05:49	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 04:21	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 19:28	CH	EET MID

Client Sample ID: BH03A

Lab Sample ID: 890-3133-6

Date Collected: 10/03/22 10:25

Matrix: Solid

Date Received: 10/03/22 15:37

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	36587	10/10/22 13:15	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/11/22 06:10	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36644	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36261	10/06/22 11:00	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36186	10/05/22 14:06	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36113	10/06/22 04:41	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	36232	10/06/22 09:40	CH	EET MID
Soluble	Analysis	300.0		1			36312	10/06/22 19:46	CH	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
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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	T104704400-22-24	06-30-23
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

Method Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

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	MCAWW	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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 25 BD Satellite Battery

Job ID: 890-3133-1
SDG: 03E1558113

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3133-1	BH01	Solid	10/03/22 10:00	10/03/22 15:37	0.5
890-3133-2	BH01A	Solid	10/03/22 10:05	10/03/22 15:37	1
890-3133-3	BH02	Solid	10/03/22 10:10	10/03/22 15:37	0.5
890-3133-4	BH02A	Solid	10/03/22 10:15	10/03/22 15:37	1
890-3133-5	BH03	Solid	10/03/22 10:20	10/03/22 15:37	0.5
890-3133-6	BH03A	Solid	10/03/22 10:25	10/03/22 15:37	1

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



Environment Testing
Xenco

Chain of Custody

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

Work Order No: _____

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Project Manager:	Ben Beill	Bill to: (if different)	Garret Green
Company Name:	Ensolum	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-887-2946	Email:	Garret.Green@ExxonMobil.com

Work Order Comments	
Program: UST/PST <input type="checkbox"/> PRP <input type="checkbox"/> Brownfields <input type="checkbox"/> RRC <input type="checkbox"/> Superfund <input type="checkbox"/>	
State of Project:	
Reporting: Level II <input type="checkbox"/> Level III <input type="checkbox"/> PST/UST <input type="checkbox"/> TRRP <input type="checkbox"/> Level IV <input type="checkbox"/>	
Deliverables: EDD <input type="checkbox"/> ADAPT <input type="checkbox"/> Other:	

Project Name:	PLU 25 BD Satellite Battery	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush	Pres. Code	ANALYSIS REQUEST		Preservative Codes
Project Number:	03E1558113						None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP
Project Location:	32.103710, -103.831225	Due Date:					
Sampler's Name:	Kase Parker	TAT starts the day received by the lab, if received by 4:30pm					
PO #:							
SAMPLE RECEIPT		Temp Blank: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Wet Ice: <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Thermometer ID:	12M007				
Cooler Custody Seals:	Yes No N/A	Correction Factor:	50.0				
Sample Custody Seals:	Yes No N/A	Temperature Reading:	19.2				
Total Containers:		Corrected Temperature:	19.0				
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont
BH01	S	10/3/2022	10:00	0.5'	G	1	X
BH01A	S	10/3/2022	10:05	1'	G	1	X
BH02	S	10/3/2022	10:10	0.5'	G	1	X
BH02A	S	10/3/2022	10:15	1'	G	1	X
BH03	S	10/3/2022	10:20	0.5'	G	1	X
BH03A	S	10/3/2022	10:25	1'	G	1	X
890-3133 Chain of Custody							
Sample Comments							
Incident ID: nAPP2223450771							
Cost Center: 2191951001							
AEE:							
bbell@ensolum.com							

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Ti	U	Hg	1631	7245	17470	7471
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																															

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	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
		10-3-22 10:37			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3133-1

SDG Number: 03E1558113

Login Number: 3133

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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: 890-3133-1

SDG Number: 03E1558113

Login Number: 3133**List Number: 2****Creator: Rodriguez, Leticia****List Source: Eurofins Midland****List Creation: 10/05/22 10:51 AM**

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



APPENDIX E

NMOCD Notifications

Ben Belill

From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Friday, September 30, 2022 2:59 PM
To: ocd.enviro@emnrd.nm.gov; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD; Nobui, Jennifer, EMNRD
Cc: DelawareSpills /SM; Tacoma Morrissey
Subject: XTO - Sampling Notification (Week of 10/03/22 - 10/07/22)

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of Oct 3, 2022.

Monday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 25 Brushy Draw Satellite / nAPP2219648561

Tuesday

- BEU 29W Vader 100H / nAPP2102831345
- ADU 624 / NAPP2123634554
- ADU 641/ NAPP2215449179

Wednesday

- BEU 29W Vader 100H / nAPP2102831345
- ADU 624 / NAPP2123634554
- ADU 641/ NAPP2215449179
- PLU 21 BD 125, 126, 905 / nAPP2215147527, nAPP2214547737, nAPP2214342255
-

Thursday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 21 BD 125, 126, 905 / nAPP2215147527, nAPP2214547737, nAPP2214342255
- PLU 78 SWD / NAPP2126639352

Friday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 78 SWD / NAPP2126639352

Thanks,

Garrett Green

Environmental Coordinator

Delaware Business Unit

(575) 200-0729

Garrett.Green@ExxonMobil.com

XTO Energy, Inc.

3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

From: [Green, Garrett J](#)
To: [Ashley Ager](#); [Tacoma Morrissey](#); [Ben Belill](#); [Stuart Hyde](#)
Subject: FW: [EXTERNAL] RE: The Oil Conservation Division (OCD) has rejected the application, Application ID: 156360
Date: Friday, March 3, 2023 3:11:46 PM
Importance: High

[**EXTERNAL EMAIL **]

From: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Sent: Friday, March 3, 2023 2:04 PM
To: Green, Garrett J <garrett.green@exxonmobil.com>
Cc: Pennington, Shelby G <shelby.g.pennington@exxonmobil.com>
Subject: RE: [EXTERNAL] RE: The Oil Conservation Division (OCD) has rejected the application, Application ID: 156360

External Email – Think Before You Click

Garrett,

It looks like the samples were collected around 10:30 a.m. and the samples were relinquished at 3:37 p.m., which is roughly 5 hours transit time. 19 degrees Celsius is about 66 degrees Fahrenheit. You would think that 5 hours on ice would bring the temperature down more than it did.

TPH wasn't high on these particular samples. I think we can approve this report after a second look. Add a short paragraph onto the closure report explaining the short transit time and that you discussed the report with myself. It will need to be uploaded through the OCD Permitting Portal, so that it can go through the proper channels. The updated report will be recorded in Incident Events and uploaded into Incident Files.

For future reference, samples that include Volatile Organics need to be cooled and relinquished at 0-6 degrees Celsius (EPA Requirements). XTO has been warned multiple times about the temperature conditions on associated samples to ensure that light end hydrocarbons don't flash and skew the sample results. Please do your best to make sure this is accomplished in the future.

Regards,

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



From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Friday, March 3, 2023 10:05 AM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Pennington, Shelby G <shelby.g.pennington@exxonmobil.com>
Subject: [EXTERNAL] RE: The Oil Conservation Division (OCD) has rejected the application, Application ID: 156360

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

Robert,

I wanted to bring this denial back to your attention. I have not received a response regarding this matter. I have also been unable to reach you by phone to discuss next steps for this incident.

Please follow up via email or phone call so we can move forward with this incident.

Thank you,

Garrett Green

Environmental Coordinator
Delaware Business Unit
(575) 200-0729
Garrett.Green@ExxonMobil.com

XTO Energy, Inc.
3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

From: Green, Garrett J
Sent: Friday, January 20, 2023 2:37 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 156360

Mr. Hamlet,

Following a second review of the laboratory analytical report you mention in the denial of this

Closure Request for Incident Number nAPP2223450771, XTO would like to provide clarification regarding your comments on the sample temperatures.

As we've mentioned in previous correspondence with NMOCD, all samples were properly handled from sample collection through submittal to the laboratory. The referenced analytical report (J3133-1) notes that samples arrived at the lab and the temperature was measured at 19.0 degrees Celsius. The samples were submitted to the lab in a cooler, preserved on ice, under proper chain-of-custody procedures, as documented in the Login Sample Receipt Checklist and Case Narrative. No flag or error was noted on the analytical report by the laboratory. The samples were submitted to the lab within hours of collecting samples. Considering the short amount of time between gathering and submitting the samples, sample temperature had not yet completely reduced.

Please note that your previous comments regarding sample temperature have been considered by XTO. This report that you have denied was submitted on November 4, 2022, prior to receipt of your initial comments regarding sample temperature on December 13, 2022.

Finally, please consider that the release in this instance was comprised of 0.24 bbls of condensate which caused a small grass fire and quickly extinguished without the need for a fire extinguisher. No staining or odor was observed while sampling, and field screenings for volatile organic compounds, conducted with a calibrated photo-ionization detector, were extremely low (0.0 to 0.1 ppm). These observations correlate with the laboratory analytical results.

With these clarifications in mind, XTO respectfully requests that you reconsider approval of the submitted Closure Request as is or please provide a convenient time to meet with us and provide further instruction on how to proceed with closure of this release.

Thank you,

Garrett Green

Environmental Coordinator
Delaware Business Unit
(575) 200-0729
Garrett.Green@ExxonMobil.com

XTO Energy, Inc.
3104 E. Greene Street | Carlsbad, NM 88220 | M: (575)200-0729

From: OCDOnline@state.nm.us [<mailto:OCDOnline@state.nm.us>]

Sent: Wednesday, January 18, 2023 2:44 PM

To: Collins, Melanie <melanie.collins@exxonmobil.com>

Subject: The Oil Conservation Division (OCD) has rejected the application, Application ID: 156360

External Email - Think Before You Click

To whom it may concern (c/o Melanie Collins for XTO ENERGY, INC),

The OCD has rejected the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2223450771, for the following reasons:

- **The Closure Report is Denied. Chain of Custody and Analysis Request form on 10/3/22 show samples not received at proper temperature of 4 deg. Celsius or below. Samples were delivered at temperature of 19.0 deg. Celsius.**

The rejected C-141 can be found in the OCD Online: Permitting - Action Status, under the Application ID: 156360.

Please review and make the required correction(s) prior to resubmitting.

If you have any questions why this application was rejected or believe it was rejected in error, please contact me prior to submitting an additional C-141.

Thank you,

Robert Hamlet

575-748-1283

Robert.Hamlet@emnrd.nm.gov

New Mexico Energy, Minerals and Natural Resources Department

1220 South St. Francis Drive

Santa Fe, NM 87505

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

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

CONDITIONS

Action 201744

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 201744
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2223450771 PLU BRUSHY DRAW 25 SATELLITE TANK BATTERY, thank you. This closure is approved. On future reports, please make sure samples are taken on the edge of the release to horizontally delineate the release extent.	8/15/2023