State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306152871
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: _Environmental Coordinator_____

Signature: _____ Date: __4/28/2023_____

email: __garrett.green@exxonmobil.com_____ Telephone: ___575-200-0729_____

OCD Only

Received by: Jocelyn Harimon Date: 05/04/2023

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: 9/19/2023

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	NAPP2306152871
District RP	
Facility ID	
Application ID	

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 32.22527 Longitude -103.93078
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU Pierce Canyon 12 Battery	Site Type Tank Battery
Date Release Discovered 02/17/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	12	24S	29E	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)

☒ Crude Oil	Volume Released (bbls) 70.94	Volume Recovered (bbls) 69.00
☐ Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release: Electrician repaired kill switch, causing pumping unit to start, tank to overflow, and fluid to release to containment and ground. Vac trucks recovered all free fluids. A third-party contractor has been retained for remediation purposes.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306152871
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Was this a major release as defined by 19.15.29.7(A) NMAC? ☒ Yes ☐ No	If YES, for what reason(s) does the responsible party consider this a major release? A release greater than 25 barrels.

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 Enviro, OCD, EMNRD; Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD on 02/20/2023 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

- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have not 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: 2/28/2023

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

OCD Only

Received by: Jocelyn Harimon Date: 03/02/2023

Location:	PLU Pierce Canyon 12 Battery	
Spill Date:	2/17/2023	
Area 1		
Approximate Area =	387.41	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	69.00	bbls
Total Produced Water =	0.00	bbls
Area 2		
Approximate Area =	3144.00	sq. ft.
Average Saturation (or depth) of spill =	0.25	inches
Average Porosity Factor =	0.15	
VOLUME OF LEAK		
Total Crude Oil =	1.75	bbls
Total Produced Water =	0.00	bbls
Area 3		
Approximate Area =	860.00	sq. ft.
Average Saturation (or depth) of spill =	0.50	inches
Average Porosity Factor =	0.03	
VOLUME OF LEAK		
Total Crude Oil =	0.19	bbls
Total Produced Water =	0.00	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**70.94**	**bbls**
Total Produced Water =	**0.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**69.00**	**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

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 192633
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	3/2/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306152871
District RP	
Facility ID	
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?	>100 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ 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)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ 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?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ 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

Incident ID	NAPP2306152871
District RP	
Facility ID	
Application ID	

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: _Environmental Coordinator_____

Signature:_____ _____ Date: ____4/28/2023_____

email: _garrett.green@exxonmobil.com_____ Telephone: ____575-200-0729_____

OCD Only

Received by: Jocelyn Harimon Date: 05/04/2023

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2306152871
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: _Environmental Coordinator_____

Signature: _____ Date: __4/28/2023_____

email: __garrett.green@exxonmobil.com_____ Telephone: ___575-200-0729_____

OCD Only

Received by: ____Jocelyn Harimon_____ Date: ___05/04/2023___

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: _____

ENSOLUM

April 28, 2023

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

Re: Closure Request
PLU Pierce Canyon 12 Battery
Incident Number NAPP2306152871
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc (XTO), has prepared this *Closure Request* to document assessment and soil sampling activities performed at the PLU Pierce Canyon 12 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 crude oil release. Based on field observations and laboratory analytical results, XTO is submitting this *Closure Request* describing Site assessment and excavation activities that have occurred and requesting no further action for Incident Number NAPP2306152871.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 12, Township 24 South, Range 29 East, in Eddy County, New Mexico (32.22527°, -103.78258°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On February 17, 2023, the pumping unit started inadvertently and caused the crude oil tank to overflow, resulting in the release of 70.94 barrels (bbls) of crude oil into a lined containment and adjacent pasture area. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; and 69.00 bbls were recovered. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD). A liner integrity inspection was conducted by XTO personnel following the fluid recovery and upon inspection, the liner was determined to be insufficient. XTO reported the release to NMOCD via email on February 20, 2023 and submitted a Release Notification Form C-141 (Form C-141) on February 28, 2023. The release was assigned Incident Number NAPP2306152871.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to determine 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 the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geographical Survey (USGS) well 321321103544101, located approximately 1.1 miles east of the Site. The groundwater well has a reported depth to groundwater of

168 feet bgs. The total depth of the well has not been recorded. All wells used to determine depth to groundwater are depicted on Figure 1. The Well Record and Log is included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a seasonal dry wash, located approximately 500 feet north of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). 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 to the top 4 feet of the pasture area of where the release extent occurred, per 19.15.29.13.D (1) NMAC.

SITE ASSESSMENT AND DELINEATION ACTIVITIES

Between March 13 and March 30, 2023, Site assessment and delineation activities were conducted to evaluate the release extent based on information provided on the Form C-141. Seven delineation soil samples (SS01 through SS06) were collected within and around the release extent and lined containment at a depth of 0.5 feet bgs. Three lateral delineation soil samples (SS04 through SS06) were collected at a depth of 0.5 feet bgs to confirm the release did not extend outside the lined containment towards the north, south, or east. One borehole (BH01) was advanved by use of hand auger at the location of the tear in the liner identified during the liner integrity inspection. Three additional boreholes (SS01/SS01A through SS03/SS03A) were advanced via hand auger and were collected within the release extent in the vicinity of soil samples SS01 through SS03, respectively. Discrete delineation soil samples were collected in each borehole from the terminal depth of 1-foot bgs. Field screening results and observations from all boreholes were documented on a lithologic/soil sampling log, which is included as Appendix B. Borehole BH01 was backfilled with the soil removed and XTO repaired the tear in the liner. Delineation soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. The liner containment, release extent, and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was conducted during the Site visit and a photographic log 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 (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range

organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0. Soil samples delivered to the laboratory the same day they were collected may not have equilabrated to 6 degrees Celcius required for shipment and long term storage, but are considered to have been received in acceptable condition by the laboratory.

EXCAVATION ACTIVITIES

On March 30, 2023, Ensolum personnel oversaw excavation activities. Soil was excavated from the release extent in the area represented by delineation soil samples SS01 through SS03, which contained elevated TPH concentrations. Excavation activities were performed by use of heavy equipment. The excavation occurred in the adjacent pasture area, west of the liner containment. To direct excavation activities, Ensolum personnel screened soil as described above.

Following removal of soil, Ensolum personnel collected 5-point composite soil samples representing up to 200 square feet from the floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS06 were collected from the floor of the excavation at approximately 1-foot bgs. Due to the shallow nature of the excavation, the sidewalls were included in the composite floor samples. The excavation soil samples were field screened, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 1,089 square feet. A total of approximately 45 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Landfill Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation areas were secured with fencing.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples SS01 through SS03 indicated TPH concentrations exceed the reclamation requirement for pasture soils in the top 4 feet. All other delineation and excavation soil samples collected indicated COC concentrations were compliant with the Closure Criteria and the reclamation requirement for pasture soils. This includes borehole BH01, which was advanced within the lined containment area and results indicated COC concentrations were compliant with the strictest Table I Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Site assessment, delineation, and excavation activities were conducted at the Site to assess for the presence or absence of impacted soil from the February 17, 2023 release of crude oil into the lined containment and adjacent pasture area, west of the containment. Following the failed liner integrity inspection at the Site, Ensolum personnel advanced borehole BH01 at the location of the tear in the liner to assess for the potential for impacts underlying the liner containment. Lateral soil samples SS04 through SS06 were collected north, south, and east of the containment area. Laboratory analytical results for BH01 and SS04 through SS06 indicated all COC concentrations were in compliance with the Closure Criteria. Excavation activities were completed based on laboratory analytical results for delineation soil samples SS01 through SS03 which indicated TPH concentrations exceeded the reclamation requirement. All excavation soil samples collected from the final excavation extent indicated all COC concentrations were compliant with the Closure Criteria as well as the reclamation requirement. Based on the soil sample analytical results, no further remediation was required. The tear in the liner was subsequently repaired and the excavation will be backfilled with material purchased locally and the

Site will be recontoured to match pre-existing site conditions. The pasture area will be seeded utilizing a BLM-approved seed mixture for this area.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. Based on initial response efforts, soil sample laboratory analytical results compliant with the Closure Criteria directly beneath the tear in the liner, and excavation of impacted soil, XTO respectfully requests closure for Incident Number NAPP2306152871.

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

Sincerely,
Ensolum, LLC

Benjamin J. Belill
Project Geologist

Ashley L. Ager, M.S., PG
Principal

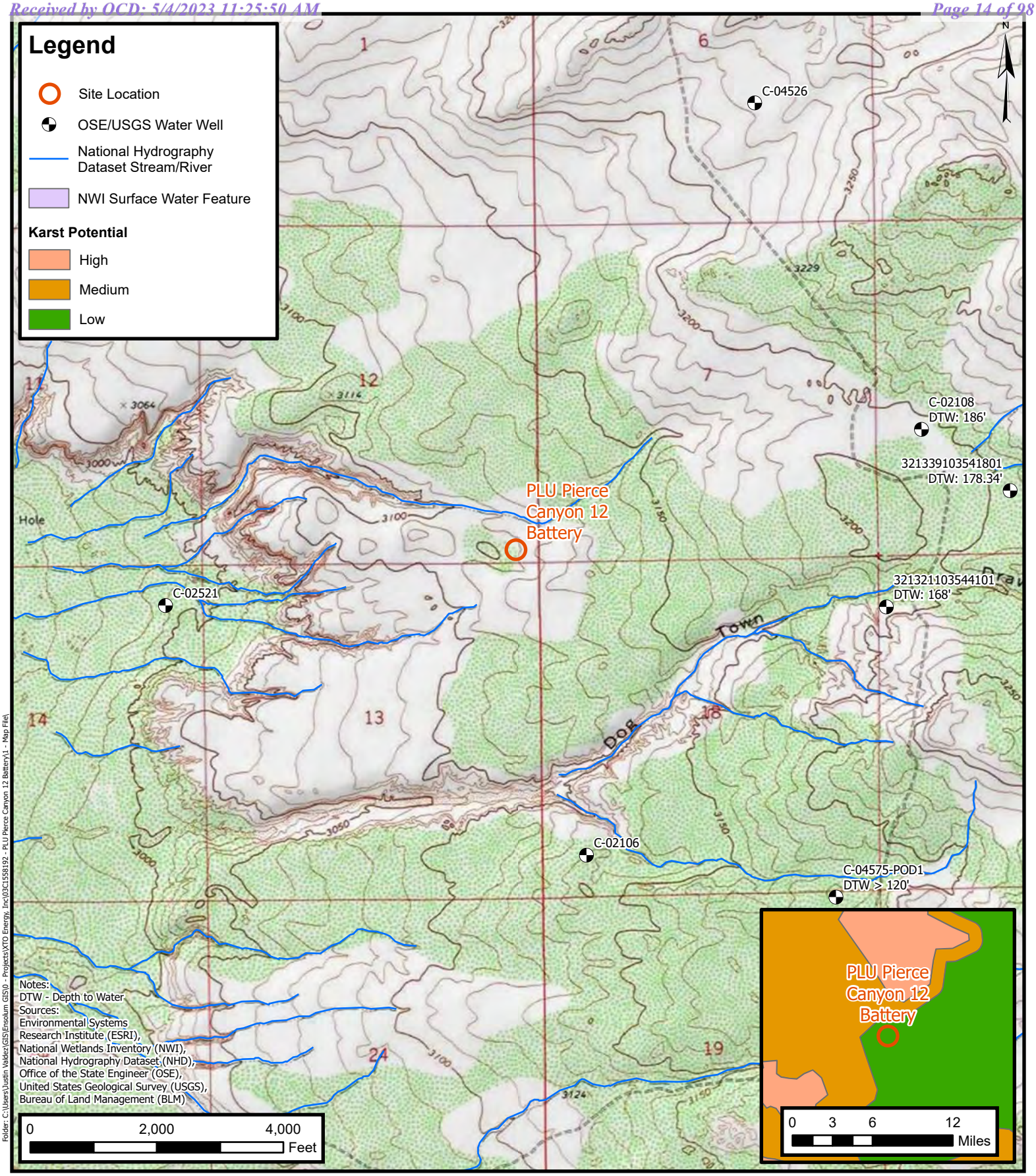
cc: Garrett Green, XTO
Shelby Pennington, XTO
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Figure 3	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic Soil Sampling Logs
Appendix C	Photographic Log
Appendix D	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix E	NMOCD Sample Notification

ENSOLUM

FIGURES



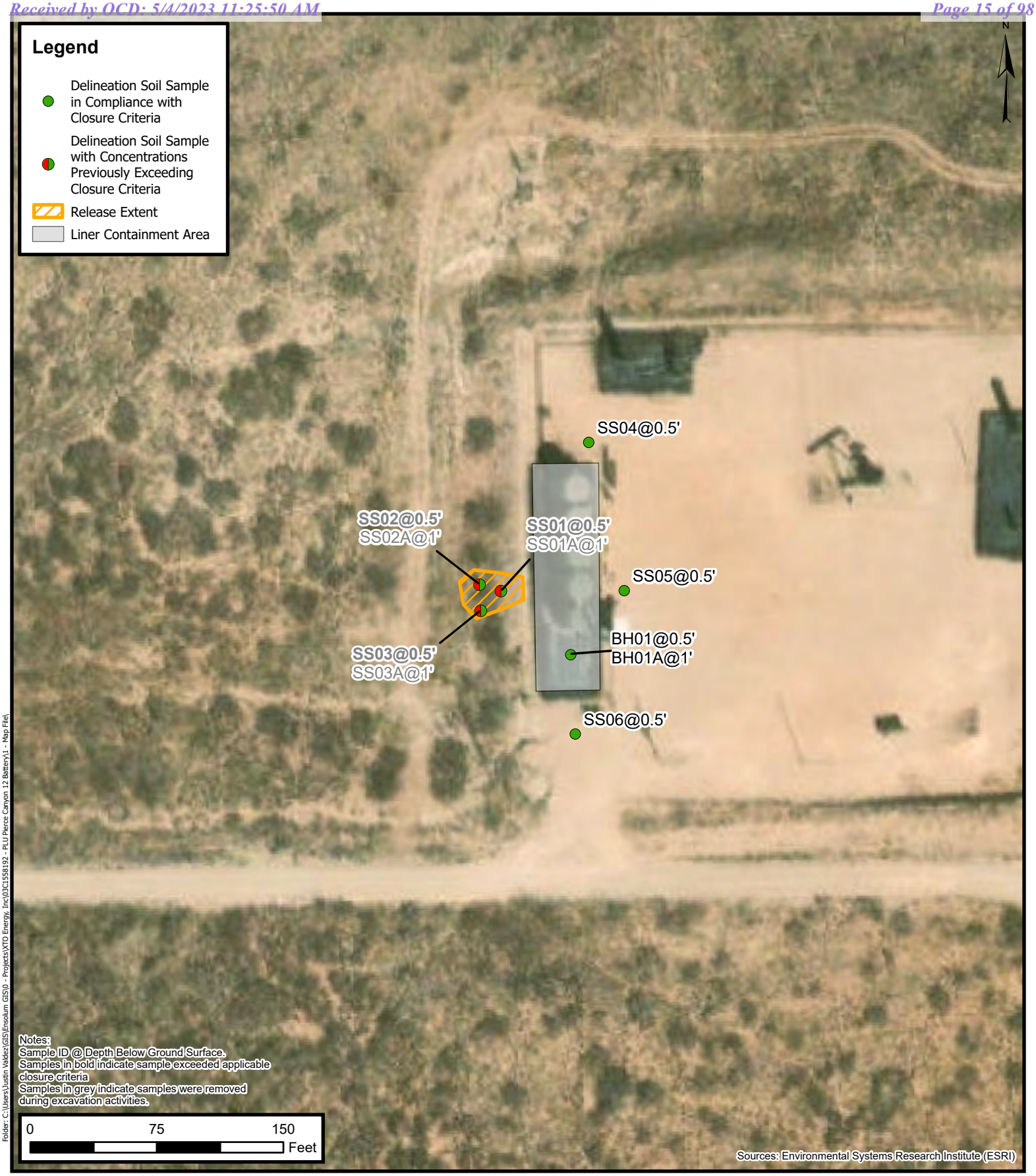
Folder: C:\Users\Justin Valdez\GIS\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558192 - PLU Pierce Canyon 12 Battery\1 - Map File\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc
PLU Pierce Canyon 12 Battery
Incident Number: NAPP2306152871
Unit P Sec 12 T24S R29E
Eddy County, New Mexico

FIGURE 1



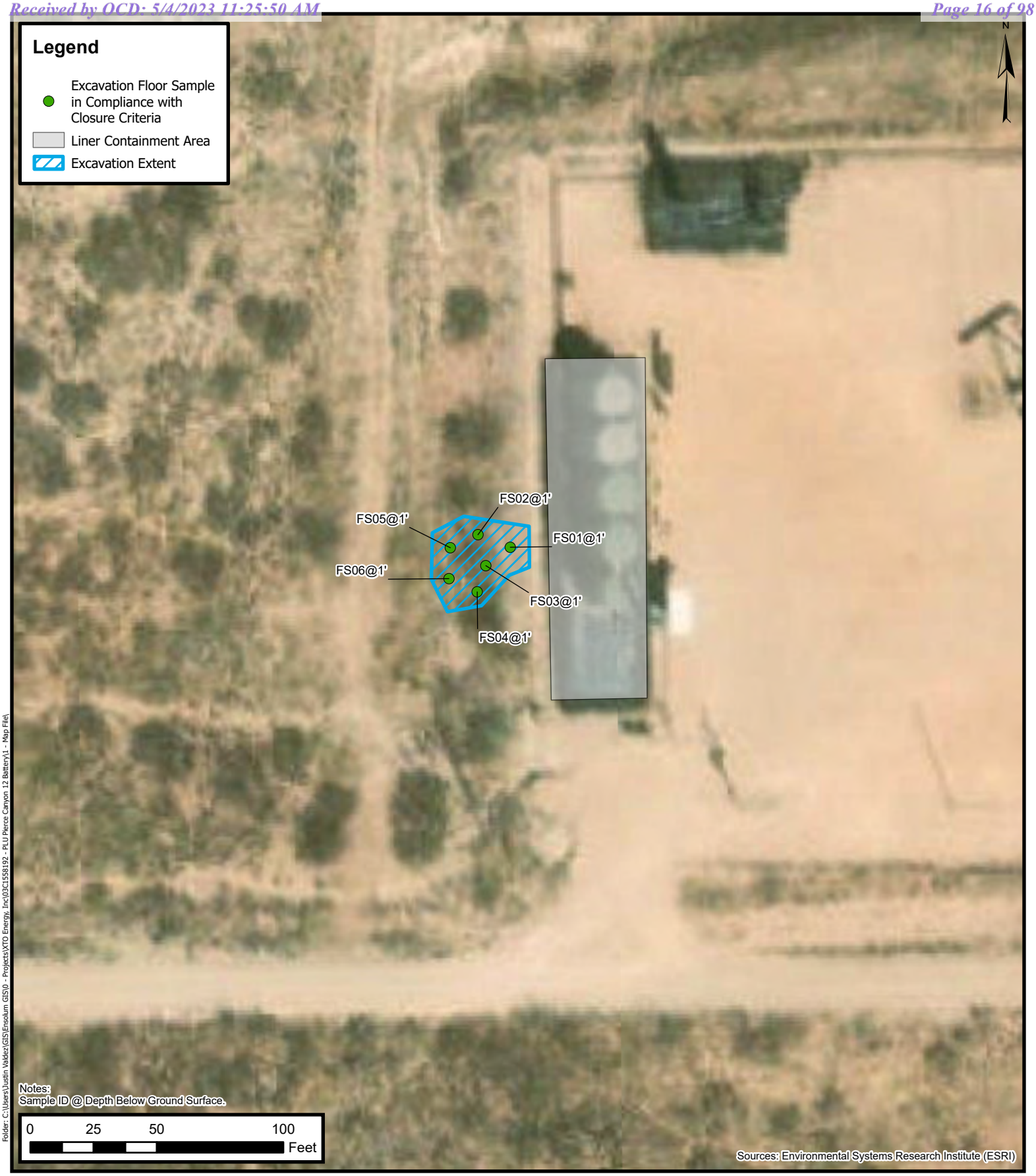
Folder: C:\Users\Justin Valdez\GIS\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558192 - PLU Pierce Canyon 12 Battery\1 - Map File\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Delineation Soil Sample Locations

XTO Energy, Inc
PLU Pierce Canyon 12 Battery
Incident Number: NAPP2306152871
Unit P Sec 12 T24S R29E
Eddy County, New Mexico

FIGURE 2



Folder: C:\Users\Justin Valdez\GIS\Ensolum GIS\0 - Projects\XTO Energy, Inc\03C1558192 - PLU Pierce Canyon 12 Battery\1 - Map File\

ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Excavation Soil Sample Locations

XTO Energy, Inc
PLU Pierce Canyon 12 Battery
Incident Number: NAPP2306152871
Unit P Sec 12 T24S R29E
Eddy County, New Mexico

FIGURE 3

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU Pierce Canyon 12 Battery
XTO Energy, Inc.
Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			**10**	**50**	**NE**	**NE**	**NE**	**1,000**	**2,500**	**20,000**
Delineation Soil Samples										
~~SS01~~	~~03/13/2023~~	~~0.5~~	~~<0.00199~~	~~0.0306~~	~~<50.0~~	~~243~~	~~<50.0~~	~~243~~	~~**243**~~	~~10.6~~
~~SS01A~~	~~03/30/2023~~	~~1~~	~~<0.00199~~	~~<0.00398~~	~~<49.8~~	~~<49.8~~	~~<49.8~~	~~<49.8~~	~~<49.8~~	~~52.4~~
~~SS02~~	~~03/13/2023~~	~~0.5~~	~~<0.00200~~	~~0.133~~	~~<50.0~~	~~646~~	~~118~~	~~646~~	~~**764**~~	~~44.2~~
~~SS02A~~	~~03/30/2023~~	~~1~~	~~<0.00200~~	~~<0.00399~~	~~<49.8~~	~~76.1~~	~~<49.8~~	~~76.1~~	~~76.1~~	~~51.7~~
~~SS03~~	~~03/13/2023~~	~~0.5~~	~~<0.00201~~	~~0.0361~~	~~<49.9~~	~~133~~	~~<49.9~~	~~133~~	~~**133**~~	~~20.4~~
~~SS03A~~	~~03/30/2023~~	~~1~~	~~<0.00198~~	~~0.0101~~	~~<49.9~~	~~<49.9~~	~~<49.9~~	~~<49.9~~	~~<49.9~~	~~69.3~~
SS04	03/30/2023	0.5	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	462
SS05	03/30/2023	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	145
SS06	03/30/2023	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	54.2
BH01	03/30/2023	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	150
BH01A	03/30/2023	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	98.7
Confirmation Soil Samples										
FS01	03/30/2023	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	41.9
FS02	03/30/2023	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	46.1
FS03	03/30/2023	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	65.7
FS04	03/30/2023	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	46.3
FS05	03/30/2023	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	63.1
FS06	03/30/2023	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	46.4

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in **bold** exceed the NMOCD Table I Closure Criteria or reclamation requirement where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

~~Grey~~ text indicates soil sample removed during excavation activities

ENSOLUM

APPENDIX A

Referenced Well Records

National Water Information System: Web Interface

USGS Water Resources

Data Category: Groundwater | Geographic Area: United States | GO

* We've detected you're using a mobile device. Find our Next Generation Station Page here.

Click to hideNews Bulletins

- Explore the NEW USGS National Water Dashboard interactive map to access real-time water data from over 13,500 stations nationwide.
- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs
site_no list =
- 321321103544101

Minimum number of levels = 1
Save file of selected sites to local disk for future upload

USGS 321321103544101 24S.30E.18.22144

Eddy County, New Mexico
Latitude 32°13'21", Longitude 103°54'41" NAD27
Land-surface elevation 3,192 feet above NAVD88
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

Output formats

Table of data
Tab-separated data
Graph of data
Reselect period

Date	Time	? Water-level date-time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source of measurement	? Water-level approval status
1983-02-01		D	62610		3022.15	NGVD29	1	Z			A
1983-02-01		D	62611		3023.80	NAVD88	1	Z			A
1983-02-01		D	72019	168.20			1	Z			A
1987-10-15		D	62610		3021.73	NGVD29	1	S			A
1987-10-15		D	62611		3023.38	NAVD88	1	S			A
1987-10-15		D	72019	168.62			1	S			A
1992-11-04		D	62610		3022.03	NGVD29	1	S			A
1992-11-04		D	62611		3023.68	NAVD88	1	S			A
1992-11-04		D	72019	168.32			1	S			A
1998-01-27		D	62610		3022.27	NGVD29	1	S			A
1998-01-27		D	62611		3023.92	NAVD88	1	S			A
1998-01-27		D	72019	168.08			1	S			A

Explanation

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

Questions about sites/data?
Feedback on this web site
Automated retrievals
Help
Data Tips
Explanation of terms
Subscribe for system changes
News

Accessibility FOIA Privacy Policies and Notices

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

Page Contact Information: USGS Water Data Support Team
Page Last Modified: 2023-03-09 13:42:15 EST
0.28 0.25 nadww02

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: BH01	Date: 3/30/2023
	Site Name: PLU Pierce Canyon 12 Battery	
	Incident Number: nAPP2305833429	
	Job Number: 03C1558190	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CW	Method: hand auger
Coordinates: 32.225218, -103.930674	Hole Diameter: 3.5"	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.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	CCHE	0-0.5', CALICHE, light brown-tan, moist, unconsolidated fill, no stain, no odor.
M	<168	0.0	N	BH01	0.5		CL	0.5'-0.75', CLAY, brown, moist, low plasticity, cohesive, no stain, no odor.
D	<168	0.1	N	BH01A	1	1	CCHE	0.75'-1', CALICHE, tan, dry, moderately consolidated, no stain, no odor.
							TD	Total Depth at 1-foot bgs.
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

Sample Name: SS01	Date: 3/30/2023	
Site Name: PLU Pierce Canyon 12 Battery		
Incident Number: nAPP2305833429		
Job Number: 03C1558190		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CW	Method: hand auger
Coordinates: 32.225321, -103.930804	Hole Diameter: 3.5"	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.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0	SP	0-1', SAND, brown-light brown, dry, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor.
D	<168	0.0	N	SS01	0.5			
D	<168	0.0	N	SS01A	1	1		
							TD	Total Depth at 1-foot bgs.
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

Sample Name: SS02	Date: 3/30/2023	
Site Name: PLU Pierce Canyon 12 Battery		
Incident Number: nAPP2305833429		
Job Number: 03C1558190		
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CW	Method: hand auger
Coordinates: 32.225343, -103.930848	Hole Diameter: 3.5"	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.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.0	N	SS02	0.5	0	SP	0-1', SAND, brown-light brown, dry, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor.
D	<168	0.0	N	SS02A	1	1		
							TD	Total Depth at 1-foot bgs.
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

	Sample Name: SS03	Date: 3/30/2023
	Site Name: PLU Pierce Canyon 12 Battery	
	Incident Number: nAPP2305833429	
	Job Number: 03C1558190	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CW	Method: hand auger
Coordinates: 32.225290, -103.930853	Hole Diameter: 3.5"	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.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	<168	0.0	N	SS03	0.5	0	SP	0-1', SAND, brown-light brown, dry, poorly graded, fine grained, some caliche gravel, trace roots, no stain, no odor.
D	<168	0.0	N	SS03A	1	1		
							TD	Total Depth at 1-foot bgs.
						2		
						3		
						4		
						5		
						6		
						7		
						8		
						9		
						10		
						11		
						12		

ENSOLUM

APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc
PLU Pierce Canyon 12 Battery
Incident Number NAPP2306152871

Photograph 1 Date: 3/13/2023
Description: Site assessment, release extent area
View: South

Photograph 2 Date: 3/3/2023
Description: Liner containment area
View: South

Photograph 3 Date: 3/3/2023
Description: Failed liner inspection
View: Northeast

Photograph 4 Date: 3/30/2023
Description: Liner patched following delineation
View: Northwest

ENSOLUM

Photographic Log
XTO Energy, Inc
PLU Pierce Canyon 12 Battery
Incident Number NAPP2306152871

Photograph 5 Date: 3/30/2023
Description: Delineation activities in pasture area
View: East

Photograph 6 Date: 3/30/2023
Description: Excavation activities
View: Northwest

Photograph 3 Date: 3/30/2023
Description: Excavation extent
View: East

Photograph 4 Date: 3/30/2023
Description: Excavation extent
View: North

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 3/25/2023 3:38:06 PM

JOB DESCRIPTION

PLU Peirce Canyon 12
SDG NUMBER 3C1558192

JOB NUMBER

890-4297-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/20/2023 8:49:25 AM

my EOL

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
3/25/2023 3:38:06 PM

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

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Laboratory Job ID: 890-4297-1
SDG: 3C1558192

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Definitions/Glossary

Client: Ensolum Job ID: 890-4297-1
Project/Site: PLU Peirce Canyon 12 SDG: 3C1558192

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, high biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits.
S1+	Surrogate recovery exceeds control limits, high biased.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Job ID: 890-4297-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4297-1

Receipt
The samples were received on 3/14/2023 8:17 AM. 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 0.8°C

GC VOA
Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-49246 and analytical batch 880-49364 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA
Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4295-A-12-A). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-48781 and analytical batch 880-48812 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-48781/2-A) and (MB 880-48781/1-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC
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 Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Client Sample ID: SS01

Lab Sample ID: 890-4297-1
Matrix: Solid
Date Collected: 03/13/23 02:50
Date Received: 03/14/23 08:17
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 F1 F2	0.00199		mg/Kg		03/22/23 16:31	03/24/23 22:15	1
Toluene	**0.00789**	**F1 F2**	0.00199		mg/Kg		03/22/23 16:31	03/24/23 22:15	1
Ethylbenzene	**0.00653**	**F1 F2**	0.00199		mg/Kg		03/22/23 16:31	03/24/23 22:15	1
m-Xylene & p-Xylene	**0.0102**	**F1 F2**	0.00398		mg/Kg		03/22/23 16:31	03/24/23 22:15	1
o-Xylene	**0.00601**	**F1 F2**	0.00199		mg/Kg		03/22/23 16:31	03/24/23 22:15	1
Xylenes, Total	**0.0162**	**F1 F2**	0.00398		mg/Kg		03/22/23 16:31	03/24/23 22:15	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:15*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:15*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0306**		0.00398		mg/Kg			03/25/23 16:19	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**243**		50.0		mg/Kg			03/21/23 09:53	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		03/16/23 14:57	03/17/23 03:34	1
Diesel Range Organics (Over C10-C28)	**243**		50.0		mg/Kg		03/16/23 14:57	03/17/23 03:34	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/16/23 14:57	03/17/23 03:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*03/16/23 14:57*	*03/17/23 03:34*	*1*
o-Terphenyl	*106*		*70 - 130*	*03/16/23 14:57*	*03/17/23 03:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**10.6**		4.99		mg/Kg			03/20/23 15:50	1

Client Sample ID: SS02

Lab Sample ID: 890-4297-2
Matrix: Solid
Date Collected: 03/13/23 02:35
Date Received: 03/14/23 08:17
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		03/22/23 16:31	03/24/23 22:36	1
Toluene	**0.0545**		0.00200		mg/Kg		03/22/23 16:31	03/24/23 22:36	1
Ethylbenzene	**0.0268**		0.00200		mg/Kg		03/22/23 16:31	03/24/23 22:36	1
m-Xylene & p-Xylene	**0.0363**		0.00399		mg/Kg		03/22/23 16:31	03/24/23 22:36	1
o-Xylene	**0.0157**		0.00200		mg/Kg		03/22/23 16:31	03/24/23 22:36	1
Xylenes, Total	**0.0520**		0.00399		mg/Kg		03/22/23 16:31	03/24/23 22:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:36*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Client Sample ID: SS02

Date Collected: 03/13/23 02:35
Date Received: 03/14/23 08:17
Sample Depth: 0.5

Lab Sample ID: 890-4297-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:36*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.133**		0.00399	mg/Kg			03/25/23 16:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**764**		50.0	mg/Kg			03/21/23 09:53	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		03/16/23 14:57	03/17/23 03:56	1
Diesel Range Organics (Over C10-C28)	**646**		50.0	mg/Kg		03/16/23 14:57	03/17/23 03:56	1
Oil Range Organics (Over C28-C36)	**118**		50.0	mg/Kg		03/16/23 14:57	03/17/23 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*93*		*70 - 130*	*03/16/23 14:57*	*03/17/23 03:56*	*1*
o-Terphenyl	*101*		*70 - 130*	*03/16/23 14:57*	*03/17/23 03:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**44.2**		4.95	mg/Kg			03/20/23 15:55	1

Client Sample ID: SS03

Date Collected: 03/13/23 02:40
Date Received: 03/14/23 08:17
Sample Depth: 0.5

Lab Sample ID: 890-4297-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/22/23 16:31	03/24/23 22:57	1
Toluene	**0.0117**		0.00201	mg/Kg		03/22/23 16:31	03/24/23 22:57	1
Ethylbenzene	**0.00726**		0.00201	mg/Kg		03/22/23 16:31	03/24/23 22:57	1
m-Xylene & p-Xylene	**0.0130**		0.00402	mg/Kg		03/22/23 16:31	03/24/23 22:57	1
o-Xylene	**0.00417**		0.00201	mg/Kg		03/22/23 16:31	03/24/23 22:57	1
Xylenes, Total	**0.0172**		0.00402	mg/Kg		03/22/23 16:31	03/24/23 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:57*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*03/22/23 16:31*	*03/24/23 22:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0361**		0.00402	mg/Kg			03/25/23 16:19	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Client Sample ID: SS03

Date Collected: 03/13/23 02:40
Date Received: 03/14/23 08:17
Sample Depth: 0.5

Lab Sample ID: 890-4297-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**133**		49.9		mg/Kg			03/21/23 09:53	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 *1	49.9		mg/Kg		03/16/23 15:06	03/17/23 11:06	1
Diesel Range Organics (Over C10-C28)	**133**		49.9		mg/Kg		03/16/23 15:06	03/17/23 11:06	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		03/16/23 15:06	03/17/23 11:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*96*		*70 - 130*	*03/16/23 15:06*	*03/17/23 11:06*	*1*
o-Terphenyl	*110*		*70 - 130*	*03/16/23 15:06*	*03/17/23 11:06*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.4**		5.00		mg/Kg			03/21/23 16:48	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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)										
890-4297-1	SS01	108	94										
890-4297-1 MS	SS01	112	94										
890-4297-1 MSD	SS01	540 S1+	73										
890-4297-2	SS02	122	107										
890-4297-3	SS03	110	95										
LCS 880-49246/1-A	Lab Control Sample	105	92										
LCSD 880-49246/2-A	Lab Control Sample Dup	110	94										
MB 880-49246/5-A	Method Blank	101	86										
MB 880-49324/5-A	Method Blank	100	86										

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)											
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)										
890-4295-A-12-B MS	Matrix Spike	129	130										
890-4295-A-12-C MSD	Matrix Spike Duplicate	113	115										
890-4297-1	SS01	99	106										
890-4297-2	SS02	93	101										
890-4297-3	SS03	96	110										
890-4297-3 MS	SS03	96	101										
890-4297-3 MSD	SS03	112	114										
LCS 880-48780/2-A	Lab Control Sample	110	123										
LCS 880-48781/2-A	Lab Control Sample	121	136 S1+										
LCSD 880-48780/3-A	Lab Control Sample Dup	108	120										
LCSD 880-48781/3-A	Lab Control Sample Dup	104	120										
MB 880-48780/1-A	Method Blank	109	129										
MB 880-48781/1-A	Method Blank	108	133 S1+										

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49246/5-A
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 49246

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		03/22/23 16:31	03/24/23 21:53	1
Toluene	<0.00200	U	0.00200		mg/Kg		03/22/23 16:31	03/24/23 21:53	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		03/22/23 16:31	03/24/23 21:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		03/22/23 16:31	03/24/23 21:53	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		03/22/23 16:31	03/24/23 21:53	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		03/22/23 16:31	03/24/23 21:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*70 - 130*	*03/22/23 16:31*	*03/24/23 21:53*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*03/22/23 16:31*	*03/24/23 21:53*	*1*

Lab Sample ID: LCS 880-49246/1-A
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 49246

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.08374		mg/Kg		84	70 - 130		
Toluene			0.100	0.08973		mg/Kg		90	70 - 130		
Ethylbenzene			0.100	0.08791		mg/Kg		88	70 - 130		
m-Xylene & p-Xylene			0.200	0.1835		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09362		mg/Kg		94	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*

Lab Sample ID: LCSD 880-49246/2-A
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 49246

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08588		mg/Kg		86	70 - 130	3	35
Toluene			0.100	0.09208		mg/Kg		92	70 - 130	3	35
Ethylbenzene			0.100	0.09292		mg/Kg		93	70 - 130	6	35
m-Xylene & p-Xylene			0.200	0.1954		mg/Kg		98	70 - 130	6	35
o-Xylene			0.100	0.09887		mg/Kg		99	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-4297-1 MS
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 49246

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U F1 F2	0.100	0.06676	F1	mg/Kg		66	70 - 130		
Toluene	0.00789	F1 F2	0.100	0.07659	F1	mg/Kg		68	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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

Lab Sample ID: 890-4297-1 MS
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 49246

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	0.00653	F1 F2	0.100	0.06807	F1	mg/Kg		61	70 - 130
m-Xylene & p-Xylene	0.0102	F1 F2	0.201	0.1448	F1	mg/Kg		67	70 - 130
o-Xylene	0.00601	F1 F2	0.100	0.07526	F1	mg/Kg		69	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*

Lab Sample ID: 890-4297-1 MSD
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: SS01
Prep Type: Total/NA
Prep Batch: 49246

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U F1 F2	0.0990	0.09833	F2	mg/Kg		99	70 - 130	38	35
Toluene	0.00789	F1 F2	0.0990	0.04805	F1 F2	mg/Kg		41	70 - 130	46	35
Ethylbenzene	0.00653	F1 F2	0.0990	0.1986	F1 F2	mg/Kg		194	70 - 130	98	35
m-Xylene & p-Xylene	0.0102	F1 F2	0.198	0.3069	F1 F2	mg/Kg		150	70 - 130	72	35
o-Xylene	0.00601	F1 F2	0.0990	0.2016	F1 F2	mg/Kg		198	70 - 130	91	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*540*	*S1+*	*70 - 130*
1,4-Difluorobenzene (Surr)	*73*		*70 - 130*

Lab Sample ID: MB 880-49324/5-A
Matrix: Solid
Analysis Batch: 49364

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 49324

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/23/23 12:25	03/24/23 11:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/23/23 12:25	03/24/23 11:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/23/23 12:25	03/24/23 11:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/23/23 12:25	03/24/23 11:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/23/23 12:25	03/24/23 11:01	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/23/23 12:25	03/24/23 11:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*03/23/23 12:25*	*03/24/23 11:01*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*03/23/23 12:25*	*03/24/23 11:01*	*1*

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

Lab Sample ID: MB 880-48780/1-A
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48780

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		03/16/23 14:57	03/16/23 20:06	1

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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

Lab Sample ID: MB 880-48780/1-A
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48780

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		03/16/23 14:57	03/16/23 20:06	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/16/23 14:57	03/16/23 20:06	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*109*		*70 - 130*	*03/16/23 14:57*	*03/16/23 20:06*	*1*
o-Terphenyl	*129*		*70 - 130*	*03/16/23 14:57*	*03/16/23 20:06*	*1*

Lab Sample ID: LCS 880-48780/2-A
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48780

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1129		mg/Kg		113	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	926.8		mg/Kg		93	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*110*		*70 - 130*
o-Terphenyl	*123*		*70 - 130*

Lab Sample ID: LCSD 880-48780/3-A
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48780

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1090		mg/Kg		109	70 - 130	4	20
Diesel Range Organics (Over C10-C28)			1000	902.1		mg/Kg		90	70 - 130	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*108*		*70 - 130*
o-Terphenyl	*120*		*70 - 130*

Lab Sample ID: 890-4295-A-12-B MS
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 48780

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1179		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	404		998	1258		mg/Kg		86	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*129*		*70 - 130*
o-Terphenyl	*130*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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

Lab Sample ID: 890-4295-A-12-C MSD
Matrix: Solid
Analysis Batch: 48705

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 48780

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	<49.9	U	999	1009		mg/Kg		96	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	404		999	1119		mg/Kg		72	70 - 130	12	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*113*		*70 - 130*
o-Terphenyl	*115*		*70 - 130*

Lab Sample ID: MB 880-48781/1-A
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 48781

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		03/16/23 15:06	03/17/23 08:28	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		03/16/23 15:06	03/17/23 08:28	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		03/16/23 15:06	03/17/23 08:28	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*03/16/23 15:06*	*03/17/23 08:28*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*03/16/23 15:06*	*03/17/23 08:28*	*1*

Lab Sample ID: LCS 880-48781/2-A
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 48781

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1075		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1006		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*121*		*70 - 130*
o-Terphenyl	*136*	*S1+*	*70 - 130*

Lab Sample ID: LCSD 880-48781/3-A
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48781

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	859.6	*1	mg/Kg		86	70 - 130	22	20
Diesel Range Organics (Over C10-C28)			1000	881.0		mg/Kg		88	70 - 130	13	20

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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

Lab Sample ID: LCSD 880-48781/3-A
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 48781

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	120		70 - 130

Lab Sample ID: 890-4297-3 MS
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: SS03
Prep Type: Total/NA
Prep Batch: 48781

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	998	898.9		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	133		998	1034		mg/Kg		90	70 - 130

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

Lab Sample ID: 890-4297-3 MSD
Matrix: Solid
Analysis Batch: 48812

Client Sample ID: SS03
Prep Type: Total/NA
Prep Batch: 48781

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	<49.9	U *1	999	1011		mg/Kg		96	70 - 130	12	20
Diesel Range Organics (Over C10-C28)	133		999	1176		mg/Kg		104	70 - 130	13	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	114		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-48890/1-A
Matrix: Solid
Analysis Batch: 49133

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			03/20/23 14:19	1

Lab Sample ID: LCS 880-48890/2-A
Matrix: Solid
Analysis Batch: 49133

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride			250	262.6		mg/Kg		105	90 - 110

QC Sample Results

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-48890/3-A
Matrix: Solid
Analysis Batch: 49133

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	257.6		mg/Kg		103	90 - 110	2	20

Lab Sample ID: 890-4297-2 MS
Matrix: Solid
Analysis Batch: 49133

Client Sample ID: SS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	44.2		248	288.4		mg/Kg		99	90 - 110		

Lab Sample ID: 890-4297-2 MSD
Matrix: Solid
Analysis Batch: 49133

Client Sample ID: SS02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	44.2		248	282.7		mg/Kg		96	90 - 110	2	20

QC Association Summary

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

GC VOA

Prep Batch: 49246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	5035	
890-4297-2	SS02	Total/NA	Solid	5035	
890-4297-3	SS03	Total/NA	Solid	5035	
MB 880-49246/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49246/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49246/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4297-1 MS	SS01	Total/NA	Solid	5035	
890-4297-1 MSD	SS01	Total/NA	Solid	5035	

Prep Batch: 49324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49324/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 49364

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	8021B	49246
890-4297-2	SS02	Total/NA	Solid	8021B	49246
890-4297-3	SS03	Total/NA	Solid	8021B	49246
MB 880-49246/5-A	Method Blank	Total/NA	Solid	8021B	49246
MB 880-49324/5-A	Method Blank	Total/NA	Solid	8021B	49324
LCS 880-49246/1-A	Lab Control Sample	Total/NA	Solid	8021B	49246
LCSD 880-49246/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49246
890-4297-1 MS	SS01	Total/NA	Solid	8021B	49246
890-4297-1 MSD	SS01	Total/NA	Solid	8021B	49246

Analysis Batch: 49504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	Total BTEX	
890-4297-2	SS02	Total/NA	Solid	Total BTEX	
890-4297-3	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 48705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	8015B NM	48780
890-4297-2	SS02	Total/NA	Solid	8015B NM	48780
MB 880-48780/1-A	Method Blank	Total/NA	Solid	8015B NM	48780
LCS 880-48780/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48780
LCSD 880-48780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48780
890-4295-A-12-B MS	Matrix Spike	Total/NA	Solid	8015B NM	48780
890-4295-A-12-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	48780

Prep Batch: 48780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	8015NM Prep	
890-4297-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-48780/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48780/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48780/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4295-A-12-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

GC Semi VOA (Continued)

Prep Batch: 48780 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4295-A-12-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Prep Batch: 48781

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-48781/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-48781/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-48781/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4297-3 MS	SS03	Total/NA	Solid	8015NM Prep	
890-4297-3 MSD	SS03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 48812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-3	SS03	Total/NA	Solid	8015B NM	48781
MB 880-48781/1-A	Method Blank	Total/NA	Solid	8015B NM	48781
LCS 880-48781/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	48781
LCSD 880-48781/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	48781
890-4297-3 MS	SS03	Total/NA	Solid	8015B NM	48781
890-4297-3 MSD	SS03	Total/NA	Solid	8015B NM	48781

Analysis Batch: 49094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Total/NA	Solid	8015 NM	
890-4297-2	SS02	Total/NA	Solid	8015 NM	
890-4297-3	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 48890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Soluble	Solid	DI Leach	
890-4297-2	SS02	Soluble	Solid	DI Leach	
890-4297-3	SS03	Soluble	Solid	DI Leach	
MB 880-48890/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-48890/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-48890/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4297-2 MS	SS02	Soluble	Solid	DI Leach	
890-4297-2 MSD	SS02	Soluble	Solid	DI Leach	

Analysis Batch: 49133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4297-1	SS01	Soluble	Solid	300.0	48890
890-4297-2	SS02	Soluble	Solid	300.0	48890
890-4297-3	SS03	Soluble	Solid	300.0	48890
MB 880-48890/1-A	Method Blank	Soluble	Solid	300.0	48890
LCS 880-48890/2-A	Lab Control Sample	Soluble	Solid	300.0	48890
LCSD 880-48890/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	48890
890-4297-2 MS	SS02	Soluble	Solid	300.0	48890
890-4297-2 MSD	SS02	Soluble	Solid	300.0	48890

Lab Chronicle

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Client Sample ID: SS01
Date Collected: 03/13/23 02:50
Date Received: 03/14/23 08:17

Lab Sample ID: 890-4297-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	49246	03/22/23 16:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49364	03/24/23 22:15	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49504	03/25/23 16:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48780	03/16/23 14:57	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48705	03/17/23 03:34	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	48890	03/18/23 15:24	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49133	03/20/23 15:50	SMC	EET MID

Client Sample ID: SS02
Date Collected: 03/13/23 02:35
Date Received: 03/14/23 08:17

Lab Sample ID: 890-4297-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	49246	03/22/23 16:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49364	03/24/23 22:36	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49504	03/25/23 16:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	48780	03/16/23 14:57	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48705	03/17/23 03:56	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	48890	03/18/23 15:24	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49133	03/20/23 15:55	SMC	EET MID

Client Sample ID: SS03
Date Collected: 03/13/23 02:40
Date Received: 03/14/23 08:17

Lab Sample ID: 890-4297-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	49246	03/22/23 16:31	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	49364	03/24/23 22:57	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			49504	03/25/23 16:19	AJ	EET MID
Total/NA	Analysis	8015 NM		1			49094	03/21/23 09:53	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	48781	03/16/23 15:06	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	48812	03/17/23 11:06	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	48890	03/18/23 15:24	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	49133	03/21/23 16:48	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

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	T104704400-22-25	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 Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU Peirce Canyon 12

Job ID: 890-4297-1
SDG: 3C1558192

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4297-1	SS01	Solid	03/13/23 02:50	03/14/23 08:17	0.5
890-4297-2	SS02	Solid	03/13/23 02:35	03/14/23 08:17	0.5
890-4297-3	SS03	Solid	03/13/23 02:40	03/14/23 08:17	0.5

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3/25/2023

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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: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Garrett 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:	Garrett.Green@ExxonMobil.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU Pierce Canyon 12	Turn Around	☑ Routine ☐ Rush
Project Number:	03C1558192	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No
Samples Received Intact:	(Yes) No	Thermometer ID:	TWM007
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	1.0
Total Containers:		Corrected Temperature:	0.8

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS01	S	3/13/2023	2:50	.5'	Grab/	1		x	x	x
SS02	S	3/13/2023	2:35	.5'	Grab/	1		x	x	x
SS03	S	3/13/2023	2:40	.5'	Grab/	1		x	x	x

890-4297 Chain of Custody

Preservative Codes

None: NO DI Water: H_2O
Cool: Cool MeOH: Me
HCL: HC HNO_3: HN
H_2SO_4: H_2 NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
nAPP2306152871
Cost Center:
1081051001
AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3.14.23 817	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Received by OCD: 5/4/2023 11:25:50 AM

Released to Imaging: 9/20/2023 8:49:23 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4297-1
SDG Number: 3C1558192

Login Number: 4297
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.	True	
Sample bottles are completely filled.	N/A	CHECK NCM
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	N/A	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
TCEQ Mtd 1005 soil sample was frozen/delivered for prep within 48H of sampling.	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4297-1
SDG Number: 3C1558192

Login Number: 4297
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 03/15/23 11:19 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	

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ANALYTICAL REPORT

PREPARED FOR

Attn: Tacoma Morrissey
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701

Generated 4/11/2023 9:58:45 AM

JOB DESCRIPTION

PLU Pierce Canyon 12 Battery
SDG NUMBER 03C1558192

JOB NUMBER

890-4451-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

Released to Imaging: 5/20/2023 8:49:25 AM

Eurofins Carlsbad

Job Notes

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

Authorization

Generated
4/11/2023 9:58:45 AM

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

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Laboratory Job ID: 890-4451-1
SDG: 03C1558192

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Definitions/Glossary

Client: Ensolum Job ID: 890-4451-1
Project/Site: PLU Pierce Canyon 12 Battery SDG: 03C1558192

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Job ID: 890-4451-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4451-1

Receipt
The samples were received on 3/30/2023 4:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 2.2°C

GC VOA
Method 8021B: Surrogate recovery for the following samples were outside control limits: BH01A (890-4451-2) and SS01A (890-4451-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-50529 and analytical batch 880-50770 was outside control limits. Sample non-homogeneity is suspected.

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 880-50230 and analytical batch 880-50110 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4450-A-3-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: SS03A (890-4451-5). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-50296 and analytical batch 880-50277 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
Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50480 and analytical batch 880-50736 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.BH01 (890-4451-1), BH01A (890-4451-2), SS01A (890-4451-3), SS02A (890-4451-4), (890-4450-A-5-C), (890-4450-A-5-D MS) and (890-4450-A-5-E MSD)

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 Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: BH01

Date Collected: 03/30/23 09:55
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		04/06/23 15:17	04/10/23 13:02	1
Toluene	<0.00201	U	0.00201		mg/Kg		04/06/23 15:17	04/10/23 13:02	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		04/06/23 15:17	04/10/23 13:02	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		04/06/23 15:17	04/10/23 13:02	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		04/06/23 15:17	04/10/23 13:02	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		04/06/23 15:17	04/10/23 13:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*	*04/06/23 15:17*	*04/10/23 13:02*	*1*
1,4-Difluorobenzene (Surr)	*112*		*70 - 130*	*04/06/23 15:17*	*04/10/23 13:02*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			04/10/23 17:54	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 00:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 00:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 00:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/03/23 15:37*	*04/04/23 00:26*	*1*
o-Terphenyl	*114*		*70 - 130*	*04/03/23 15:37*	*04/04/23 00:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**150**		5.02		mg/Kg			04/08/23 15:16	1

Client Sample ID: BH01A

Date Collected: 03/30/23 10:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:23	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:23	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:23	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 13:23	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:23	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 13:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*58*	*S1-*	*70 - 130*	*04/06/23 15:17*	*04/10/23 13:23*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*04/06/23 15:17*	*04/10/23 13:23*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: BH01A
Date Collected: 03/30/23 10:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-2
Matrix: Solid

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			04/10/23 17:54	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 00:47	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 00:47	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 00:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*04/03/23 15:37*	*04/04/23 00:47*	*1*
o-Terphenyl	*113*		*70 - 130*	*04/03/23 15:37*	*04/04/23 00:47*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**98.7**		5.04		mg/Kg			04/08/23 15:20	1

Client Sample ID: SS01A
Date Collected: 03/30/23 11:40
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:43	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:43	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 13:43	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 13:43	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 13:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*46*	*S1-*	*70 - 130*	*04/06/23 15:17*	*04/10/23 13:43*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*04/06/23 15:17*	*04/10/23 13:43*	*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			04/10/23 17:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			04/04/23 10:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 01:29	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 01:29	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS01A

Date Collected: 03/30/23 11:40
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 01:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*04/03/23 15:37*	*04/04/23 01:29*	*1*
o-Terphenyl	*110*		*70 - 130*	*04/03/23 15:37*	*04/04/23 01:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**52.4**		4.99		mg/Kg			04/08/23 15:25	1

Client Sample ID: SS02A

Date Collected: 03/30/23 11:45
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-4
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		04/06/23 15:17	04/10/23 14:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:04	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 14:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:04	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 14:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:04*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:04*	*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			04/10/23 17:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**76.1**		49.8		mg/Kg			04/04/23 10:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 01:50	1
Diesel Range Organics (Over C10-C28)	**76.1**		49.8		mg/Kg		04/03/23 15:37	04/04/23 01:50	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 01:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*04/03/23 15:37*	*04/04/23 01:50*	*1*
o-Terphenyl	*109*		*70 - 130*	*04/03/23 15:37*	*04/04/23 01:50*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**51.7**		4.99		mg/Kg			04/08/23 15:29	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS03A

Lab Sample ID: 890-4451-5
Matrix: Solid
Date Collected: 03/30/23 11:50
Date Received: 03/30/23 16:58

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 14:25	1
Toluene	**0.00630**		0.00198		mg/Kg		04/06/23 15:17	04/10/23 14:25	1
Ethylbenzene	**0.00381**		0.00198		mg/Kg		04/06/23 15:17	04/10/23 14:25	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/06/23 15:17	04/10/23 14:25	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 14:25	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/06/23 15:17	04/10/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:25*	*1*
1,4-Difluorobenzene (Surr)	*130*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:25*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	**0.0101**		0.00396		mg/Kg			04/10/23 17:54	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 02:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 02:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 02:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*04/03/23 15:37*	*04/04/23 02:11*	*1*
o-Terphenyl	*133*	*S1+*	*70 - 130*	*04/03/23 15:37*	*04/04/23 02:11*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**69.3**		5.05		mg/Kg			04/08/23 11:42	1

Client Sample ID: SS04

Lab Sample ID: 890-4451-6
Matrix: Solid
Date Collected: 03/30/23 12:10
Date Received: 03/30/23 16:58

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		04/06/23 15:17	04/10/23 14:45	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:45	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:45	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 14:45	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 14:45	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:45*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/06/23 15:17*	*04/10/23 14:45*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS04

Date Collected: 03/30/23 12:10
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-6
Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/10/23 17:54	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8		mg/Kg			04/04/23 10:02	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 02:32	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 02:32	1
OII Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		04/03/23 15:37	04/04/23 02:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/03/23 15:37*	*04/04/23 02:32*	*1*
o-Terphenyl	*107*		*70 - 130*	*04/03/23 15:37*	*04/04/23 02:32*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**462**		4.99		mg/Kg			04/08/23 11:57	1

Client Sample ID: SS05

Date Collected: 03/30/23 12:15
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 15:06	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 15:06	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 15:06	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 15:06	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 15:06	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 15:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/06/23 15:17*	*04/10/23 15:06*	*1*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*	*04/06/23 15:17*	*04/10/23 15:06*	*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			04/10/23 17:54	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 02:54	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 02:54	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS05

Date Collected: 03/30/23 12:15
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*99*		*70 - 130*	*04/03/23 15:37*	*04/04/23 02:54*	*1*
o-Terphenyl	*109*		*70 - 130*	*04/03/23 15:37*	*04/04/23 02:54*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**145**		4.97		mg/Kg			04/08/23 12:02	1

Client Sample ID: SS06

Date Collected: 03/30/23 12:20
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-8
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		04/06/23 15:17	04/10/23 15:27	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 15:27	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 15:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 15:27	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 15:27	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 15:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*04/06/23 15:17*	*04/10/23 15:27*	*1*
1,4-Difluorobenzene (Surr)	*110*		*70 - 130*	*04/06/23 15:17*	*04/10/23 15:27*	*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			04/10/23 17:54	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 03:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 03:16	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*101*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:16*	*1*
o-Terphenyl	*111*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:16*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**54.2**		4.98		mg/Kg			04/08/23 12:06	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS01

Lab Sample ID: 890-4451-9
Matrix: Solid
Date Collected: 03/30/23 14:20
Date Received: 03/30/23 16:58

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		04/06/23 15:17	04/10/23 16:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 16:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 16:51	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 16:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 16:51	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 16:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/06/23 15:17*	*04/10/23 16:51*	*1*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*04/06/23 15:17*	*04/10/23 16:51*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/11/23 10:26	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 03:37	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 03:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 03:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:37*	*1*
o-Terphenyl	*105*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:37*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**41.9**		5.01		mg/Kg			04/08/23 12:11	1

Client Sample ID: FS02

Lab Sample ID: 890-4451-10
Matrix: Solid
Date Collected: 03/30/23 14:25
Date Received: 03/30/23 16:58

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		04/06/23 15:17	04/10/23 17:12	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 17:12	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 17:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 17:12	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 17:12	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 17:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:12*	*1*
1,4-Difluorobenzene (Surr)	*115*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:12*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS02

Lab Sample ID: 890-4451-10
Matrix: Solid
Date Collected: 03/30/23 14:25
Date Received: 03/30/23 16:58

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			04/11/23 10:26	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 03:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 03:58	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 03:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*102*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:58*	*1*
o-Terphenyl	*112*		*70 - 130*	*04/03/23 15:37*	*04/04/23 03:58*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.1**		5.03		mg/Kg			04/08/23 12:26	1

Client Sample ID: FS03

Lab Sample ID: 890-4451-11
Matrix: Solid
Date Collected: 03/30/23 14:30
Date Received: 03/30/23 16:58

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		04/06/23 15:17	04/10/23 17:32	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 17:32	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 17:32	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 17:32	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 17:32	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		04/06/23 15:17	04/10/23 17:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:32*	*1*
1,4-Difluorobenzene (Surr)	*111*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:32*	*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			04/11/23 10:26	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 04:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 04:19	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS03

Date Collected: 03/30/23 14:30
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/03/23 15:37	04/04/23 04:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*97*		*70 - 130*	*04/03/23 15:37*	*04/04/23 04:19*	*1*
o-Terphenyl	*108*		*70 - 130*	*04/03/23 15:37*	*04/04/23 04:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**65.7**		5.04		mg/Kg			04/08/23 12:31	1

Client Sample ID: FS04

Date Collected: 03/30/23 14:35
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 17:53	1
Toluene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 17:53	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 17:53	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		04/06/23 15:17	04/10/23 17:53	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		04/06/23 15:17	04/10/23 17:53	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		04/06/23 15:17	04/10/23 17:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:53*	*1*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*	*04/06/23 15:17*	*04/10/23 17:53*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396		mg/Kg			04/11/23 10:26	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			04/04/23 10:02	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		04/03/23 15:37	04/04/23 04:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 04:40	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/04/23 04:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*113*		*70 - 130*	*04/03/23 15:37*	*04/04/23 04:40*	*1*
o-Terphenyl	*123*		*70 - 130*	*04/03/23 15:37*	*04/04/23 04:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.3**		4.99		mg/Kg			04/08/23 12:35	1

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS05

Date Collected: 03/30/23 14:55
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-13
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 18:14	1
Toluene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 18:14	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 18:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 18:14	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		04/06/23 15:17	04/10/23 18:14	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		04/06/23 15:17	04/10/23 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*116*		*70 - 130*	*04/06/23 15:17*	*04/10/23 18:14*	*1*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*	*04/06/23 15:17*	*04/10/23 18:14*	*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			04/11/23 10:26	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			04/05/23 09:23	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		04/04/23 09:34	04/04/23 12:19	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/04/23 09:34	04/04/23 12:19	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/04/23 09:34	04/04/23 12:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*104*		*70 - 130*	*04/04/23 09:34*	*04/04/23 12:19*	*1*
o-Terphenyl	*90*		*70 - 130*	*04/04/23 09:34*	*04/04/23 12:19*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**63.1**		5.00		mg/Kg			04/08/23 12:40	1

Client Sample ID: FS06

Date Collected: 03/30/23 15:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-14
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		04/06/23 15:17	04/10/23 18:34	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 18:34	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 18:34	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 18:34	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 18:34	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		04/06/23 15:17	04/10/23 18:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*70 - 130*	*04/06/23 15:17*	*04/10/23 18:34*	*1*
1,4-Difluorobenzene (Surr)	*108*		*70 - 130*	*04/06/23 15:17*	*04/10/23 18:34*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS06

Date Collected: 03/30/23 15:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-14

Matrix: Solid

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			04/11/23 10:26	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			04/05/23 09:23	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		04/04/23 09:34	04/04/23 12:41	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		04/04/23 09:34	04/04/23 12:41	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		04/04/23 09:34	04/04/23 12:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*100*		*70 - 130*	*04/04/23 09:34*	*04/04/23 12:41*	*1*
o-Terphenyl	*77*		*70 - 130*	*04/04/23 09:34*	*04/04/23 12:41*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**46.4**		5.00		mg/Kg			04/08/23 12:45	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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)
890-4439-A-13-C MS	Matrix Spike	103	101
890-4439-A-13-D MSD	Matrix Spike Duplicate	109	98
890-4451-1	BH01	113	112
890-4451-2	BH01A	58 S1-	93
890-4451-3	SS01A	46 S1-	100
890-4451-4	SS02A	105	101
890-4451-5	SS03A	104	130
890-4451-6	SS04	102	104
890-4451-7	SS05	107	109
890-4451-8	SS06	107	110
890-4451-9	FS01	100	100
890-4451-10	FS02	108	115
890-4451-11	FS03	109	111
890-4451-12	FS04	114	101
890-4451-13	FS05	116	104
890-4451-14	FS06	117	108
LCS 880-50529/1-A	Lab Control Sample	104	101
LCSD 880-50529/2-A	Lab Control Sample Dup	108	100
MB 880-50529/5-A	Method Blank	100	90

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)
880-26738-A-1-E MS	Matrix Spike	111	75
880-26738-A-1-F MSD	Matrix Spike Duplicate	112	75
890-4450-A-3-B MS	Matrix Spike	135 S1+	137 S1+
890-4450-A-3-C MSD	Matrix Spike Duplicate	117	117
890-4451-1	BH01	99	114
890-4451-2	BH01A	101	113
890-4451-3	SS01A	102	110
890-4451-4	SS02A	100	109
890-4451-5	SS03A	118	133 S1+
890-4451-6	SS04	99	107
890-4451-7	SS05	99	109
890-4451-8	SS06	101	111
890-4451-9	FS01	97	105
890-4451-10	FS02	102	112
890-4451-11	FS03	97	108
890-4451-12	FS04	113	123
890-4451-13	FS05	104	90
890-4451-14	FS06	100	77
LCS 880-50230/2-A	Lab Control Sample	109	116
LCS 880-50296/2-A	Lab Control Sample	126	96

Surrogate Summary

Client: Ensolum Job ID: 890-4451-1
Project/Site: PLU Pierce Canyon 12 Battery SDG: 03C1558192

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

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)									
		1CO1	OTPH1								
Lab Sample ID	Client Sample ID	(70-130)	(70-130)								
LCSD 880-50230/3-A	Lab Control Sample Dup	104	115								
LCSD 880-50296/3-A	Lab Control Sample Dup	104	80								
MB 880-50230/1-A	Method Blank	130	146 S1+								
MB 880-50296/1-A	Method Blank	143 S1+	118								

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50529/5-A
Matrix: Solid
Analysis Batch: 50770

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50529

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 11:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 11:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 11:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		04/06/23 15:17	04/10/23 11:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		04/06/23 15:17	04/10/23 11:58	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		04/06/23 15:17	04/10/23 11:58	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*70 - 130*	*04/06/23 15:17*	*04/10/23 11:58*	*1*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*04/06/23 15:17*	*04/10/23 11:58*	*1*

Lab Sample ID: LCS 880-50529/1-A
Matrix: Solid
Analysis Batch: 50770

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50529

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1078		mg/Kg		108	70 - 130		
Toluene			0.100	0.1119		mg/Kg		112	70 - 130		
Ethylbenzene			0.100	0.1137		mg/Kg		114	70 - 130		
m-Xylene & p-Xylene			0.200	0.2304		mg/Kg		115	70 - 130		
o-Xylene			0.100	0.1011		mg/Kg		101	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: LCSD 880-50529/2-A
Matrix: Solid
Analysis Batch: 50770

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50529

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09796		mg/Kg		98	70 - 130	10	35
Toluene			0.100	0.1046		mg/Kg		105	70 - 130	7	35
Ethylbenzene			0.100	0.1089		mg/Kg		109	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2235		mg/Kg		112	70 - 130	3	35
o-Xylene			0.100	0.09895		mg/Kg		99	70 - 130	2	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-4439-A-13-C MS
Matrix: Solid
Analysis Batch: 50770

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 50529

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00198	U F2 F1	0.0998	0.07358		mg/Kg		74	70 - 130		
Toluene	<0.00198	U F2 F1	0.0998	0.07699		mg/Kg		77	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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

Lab Sample ID: 890-4439-A-13-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50770 — **Prep Batch: 50529**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U F2 F1	0.0998	0.07785		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.200	0.1579		mg/Kg		79	70 - 130
o-Xylene	<0.00198	U F2 F1	0.0998	0.07072		mg/Kg		71	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*103*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: 890-4439-A-13-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50770 — **Prep Batch: 50529**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F2 F1	0.101	0.09784		mg/Kg		97	70 - 130	28	35
Toluene	<0.00198	U F2 F1	0.101	0.1050		mg/Kg		104	70 - 130	31	35
Ethylbenzene	<0.00198	U F2 F1	0.101	0.1113		mg/Kg		110	70 - 130	35	35
m-Xylene & p-Xylene	<0.00396	U F2 F1	0.202	0.2273	F2	mg/Kg		113	70 - 130	36	35
o-Xylene	<0.00198	U F2 F1	0.101	0.09926		mg/Kg		98	70 - 130	34	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*109*		*70 - 130*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*

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

Lab Sample ID: MB 880-50230/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50110 — **Prep Batch: 50230**

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		04/03/23 15:37	04/03/23 19:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/03/23 19:42	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/03/23 15:37	04/03/23 19:42	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*04/03/23 15:37*	*04/03/23 19:42*	*1*
o-Terphenyl	*146*	*S1+*	*70 - 130*	*04/03/23 15:37*	*04/03/23 19:42*	*1*

Lab Sample ID: LCS 880-50230/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 50110 — **Prep Batch: 50230**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	977.0		mg/Kg		98	70 - 130
Diesel Range Organics (Over C10-C28)			1000	879.9		mg/Kg		88	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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

Lab Sample ID: LCS 880-50230/2-A
Matrix: Solid
Analysis Batch: 50110

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50230

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	109		70 - 130
o-Terphenyl	116		70 - 130

Lab Sample ID: LCSD 880-50230/3-A
Matrix: Solid
Analysis Batch: 50110

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50230

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	810.2		mg/Kg		81	70 - 130	19	20
Diesel Range Organics (Over C10-C28)			1000	857.8		mg/Kg		86	70 - 130	3	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	115		70 - 130

Lab Sample ID: 890-4450-A-3-B MS
Matrix: Solid
Analysis Batch: 50110

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 50230

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1170		mg/Kg		115	70 - 130
Diesel Range Organics (Over C10-C28)	153		998	1209		mg/Kg		106	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	137	S1+	70 - 130

Lab Sample ID: 890-4450-A-3-C MSD
Matrix: Solid
Analysis Batch: 50110

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 50230

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	<49.9	U	999	994.8		mg/Kg		97	70 - 130	16	20
Diesel Range Organics (Over C10-C28)	153		999	1051		mg/Kg		90	70 - 130	14	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	117		70 - 130
o-Terphenyl	117		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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

Lab Sample ID: MB 880-50296/1-A
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 50296

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		04/04/23 07:34	04/04/23 07:57	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		04/04/23 07:34	04/04/23 07:57	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		04/04/23 07:34	04/04/23 07:57	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*143*	*S1+*	*70 - 130*	*04/04/23 07:34*	*04/04/23 07:57*	*1*
o-Terphenyl	*118*		*70 - 130*	*04/04/23 07:34*	*04/04/23 07:57*	*1*

Lab Sample ID: LCS 880-50296/2-A
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50296

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	836.1		mg/Kg		84	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	919.8		mg/Kg		92	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*126*		*70 - 130*
o-Terphenyl	*96*		*70 - 130*

Lab Sample ID: LCSD 880-50296/3-A
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50296

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	933.6		mg/Kg		93	70 - 130	11	20
Diesel Range Organics (Over C10-C28)			1000	965.5		mg/Kg		97	70 - 130	5	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*104*		*70 - 130*
o-Terphenyl	*80*		*70 - 130*

Lab Sample ID: 880-26738-A-1-E MS
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 50296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1130		mg/Kg		109	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	998	926.0		mg/Kg		93	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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

Lab Sample ID: 880-26738-A-1-E MS
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 50296

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	111		70 - 130
o-Terphenyl	75		70 - 130

Lab Sample ID: 880-26738-A-1-F MSD
Matrix: Solid
Analysis Batch: 50277

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 50296

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	<49.9	U	999	1201		mg/Kg		116	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	932.3		mg/Kg		93	70 - 130	1	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	75		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50482/1-A
Matrix: Solid
Analysis Batch: 50729

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			04/08/23 11:28	1

Lab Sample ID: LCS 880-50482/2-A
Matrix: Solid
Analysis Batch: 50729

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	250.7		mg/Kg		100	90 - 110		

Lab Sample ID: LCSD 880-50482/3-A
Matrix: Solid
Analysis Batch: 50729

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	251.7		mg/Kg		101	90 - 110	0	20

Lab Sample ID: 890-4451-5 MS
Matrix: Solid
Analysis Batch: 50729

Client Sample ID: SS03A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	69.3		253	309.6		mg/Kg		95	90 - 110		

QC Sample Results

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-4451-5 MSD
Matrix: Solid
Analysis Batch: 50729

Client Sample ID: SS03A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	69.3		253	309.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: MB 880-50480/1-A
Matrix: Solid
Analysis Batch: 50736

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			04/08/23 12:49	1

Lab Sample ID: LCS 880-50480/2-A
Matrix: Solid
Analysis Batch: 50736

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	238.4		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-50480/3-A
Matrix: Solid
Analysis Batch: 50736

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	238.3		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-4450-A-5-D MS
Matrix: Solid
Analysis Batch: 50736

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	592	F1	249	730.0	F1	mg/Kg		55	90 - 110		

Lab Sample ID: 890-4450-A-5-E MSD
Matrix: Solid
Analysis Batch: 50736

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	592	F1	249	733.4	F1	mg/Kg		57	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

GC VOA

Prep Batch: 50529

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	5035	
890-4451-2	BH01A	Total/NA	Solid	5035	
890-4451-3	SS01A	Total/NA	Solid	5035	
890-4451-4	SS02A	Total/NA	Solid	5035	
890-4451-5	SS03A	Total/NA	Solid	5035	
890-4451-6	SS04	Total/NA	Solid	5035	
890-4451-7	SS05	Total/NA	Solid	5035	
890-4451-8	SS06	Total/NA	Solid	5035	
890-4451-9	FS01	Total/NA	Solid	5035	
890-4451-10	FS02	Total/NA	Solid	5035	
890-4451-11	FS03	Total/NA	Solid	5035	
890-4451-12	FS04	Total/NA	Solid	5035	
890-4451-13	FS05	Total/NA	Solid	5035	
890-4451-14	FS06	Total/NA	Solid	5035	
MB 880-50529/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50529/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50529/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4439-A-13-C MS	Matrix Spike	Total/NA	Solid	5035	
890-4439-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 50770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	8021B	50529
890-4451-2	BH01A	Total/NA	Solid	8021B	50529
890-4451-3	SS01A	Total/NA	Solid	8021B	50529
890-4451-4	SS02A	Total/NA	Solid	8021B	50529
890-4451-5	SS03A	Total/NA	Solid	8021B	50529
890-4451-6	SS04	Total/NA	Solid	8021B	50529
890-4451-7	SS05	Total/NA	Solid	8021B	50529
890-4451-8	SS06	Total/NA	Solid	8021B	50529
890-4451-9	FS01	Total/NA	Solid	8021B	50529
890-4451-10	FS02	Total/NA	Solid	8021B	50529
890-4451-11	FS03	Total/NA	Solid	8021B	50529
890-4451-12	FS04	Total/NA	Solid	8021B	50529
890-4451-13	FS05	Total/NA	Solid	8021B	50529
890-4451-14	FS06	Total/NA	Solid	8021B	50529
MB 880-50529/5-A	Method Blank	Total/NA	Solid	8021B	50529
LCS 880-50529/1-A	Lab Control Sample	Total/NA	Solid	8021B	50529
LCSD 880-50529/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50529
890-4439-A-13-C MS	Matrix Spike	Total/NA	Solid	8021B	50529
890-4439-A-13-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	50529

Analysis Batch: 50857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	Total BTEX	
890-4451-2	BH01A	Total/NA	Solid	Total BTEX	
890-4451-3	SS01A	Total/NA	Solid	Total BTEX	
890-4451-4	SS02A	Total/NA	Solid	Total BTEX	
890-4451-5	SS03A	Total/NA	Solid	Total BTEX	
890-4451-6	SS04	Total/NA	Solid	Total BTEX	
890-4451-7	SS05	Total/NA	Solid	Total BTEX	

QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

GC VOA (Continued)

Analysis Batch: 50857 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-8	SS06	Total/NA	Solid	Total BTEX	
890-4451-9	FS01	Total/NA	Solid	Total BTEX	
890-4451-10	FS02	Total/NA	Solid	Total BTEX	
890-4451-11	FS03	Total/NA	Solid	Total BTEX	
890-4451-12	FS04	Total/NA	Solid	Total BTEX	
890-4451-13	FS05	Total/NA	Solid	Total BTEX	
890-4451-14	FS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 50110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	8015B NM	50230
890-4451-2	BH01A	Total/NA	Solid	8015B NM	50230
890-4451-3	SS01A	Total/NA	Solid	8015B NM	50230
890-4451-4	SS02A	Total/NA	Solid	8015B NM	50230
890-4451-5	SS03A	Total/NA	Solid	8015B NM	50230
890-4451-6	SS04	Total/NA	Solid	8015B NM	50230
890-4451-7	SS05	Total/NA	Solid	8015B NM	50230
890-4451-8	SS06	Total/NA	Solid	8015B NM	50230
890-4451-9	FS01	Total/NA	Solid	8015B NM	50230
890-4451-10	FS02	Total/NA	Solid	8015B NM	50230
890-4451-11	FS03	Total/NA	Solid	8015B NM	50230
890-4451-12	FS04	Total/NA	Solid	8015B NM	50230
MB 880-50230/1-A	Method Blank	Total/NA	Solid	8015B NM	50230
LCS 880-50230/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50230
LCSD 880-50230/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50230
890-4450-A-3-B MS	Matrix Spike	Total/NA	Solid	8015B NM	50230
890-4450-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	50230

Prep Batch: 50230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	8015NM Prep	
890-4451-2	BH01A	Total/NA	Solid	8015NM Prep	
890-4451-3	SS01A	Total/NA	Solid	8015NM Prep	
890-4451-4	SS02A	Total/NA	Solid	8015NM Prep	
890-4451-5	SS03A	Total/NA	Solid	8015NM Prep	
890-4451-6	SS04	Total/NA	Solid	8015NM Prep	
890-4451-7	SS05	Total/NA	Solid	8015NM Prep	
890-4451-8	SS06	Total/NA	Solid	8015NM Prep	
890-4451-9	FS01	Total/NA	Solid	8015NM Prep	
890-4451-10	FS02	Total/NA	Solid	8015NM Prep	
890-4451-11	FS03	Total/NA	Solid	8015NM Prep	
890-4451-12	FS04	Total/NA	Solid	8015NM Prep	
MB 880-50230/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50230/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50230/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4450-A-3-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4450-A-3-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

GC Semi VOA

Analysis Batch: 50277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-13	FS05	Total/NA	Solid	8015B NM	50296
890-4451-14	FS06	Total/NA	Solid	8015B NM	50296
MB 880-50296/1-A	Method Blank	Total/NA	Solid	8015B NM	50296
LCS 880-50296/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50296
LCSD 880-50296/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50296
880-26738-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	50296
880-26738-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	50296

Prep Batch: 50296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-13	FS05	Total/NA	Solid	8015NM Prep	
890-4451-14	FS06	Total/NA	Solid	8015NM Prep	
MB 880-50296/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50296/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50296/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-26738-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-26738-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 50301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Total/NA	Solid	8015 NM	
890-4451-2	BH01A	Total/NA	Solid	8015 NM	
890-4451-3	SS01A	Total/NA	Solid	8015 NM	
890-4451-4	SS02A	Total/NA	Solid	8015 NM	
890-4451-5	SS03A	Total/NA	Solid	8015 NM	
890-4451-6	SS04	Total/NA	Solid	8015 NM	
890-4451-7	SS05	Total/NA	Solid	8015 NM	
890-4451-8	SS06	Total/NA	Solid	8015 NM	
890-4451-9	FS01	Total/NA	Solid	8015 NM	
890-4451-10	FS02	Total/NA	Solid	8015 NM	
890-4451-11	FS03	Total/NA	Solid	8015 NM	
890-4451-12	FS04	Total/NA	Solid	8015 NM	
890-4451-13	FS05	Total/NA	Solid	8015 NM	
890-4451-14	FS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Soluble	Solid	DI Leach	
890-4451-2	BH01A	Soluble	Solid	DI Leach	
890-4451-3	SS01A	Soluble	Solid	DI Leach	
890-4451-4	SS02A	Soluble	Solid	DI Leach	
MB 880-50480/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50480/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50480/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4450-A-5-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4450-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

HPLC/IC

Leach Batch: 50482

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-5	SS03A	Soluble	Solid	DI Leach	
890-4451-6	SS04	Soluble	Solid	DI Leach	
890-4451-7	SS05	Soluble	Solid	DI Leach	
890-4451-8	SS06	Soluble	Solid	DI Leach	
890-4451-9	FS01	Soluble	Solid	DI Leach	
890-4451-10	FS02	Soluble	Solid	DI Leach	
890-4451-11	FS03	Soluble	Solid	DI Leach	
890-4451-12	FS04	Soluble	Solid	DI Leach	
890-4451-13	FS05	Soluble	Solid	DI Leach	
890-4451-14	FS06	Soluble	Solid	DI Leach	
MB 880-50482/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50482/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50482/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4451-5 MS	SS03A	Soluble	Solid	DI Leach	
890-4451-5 MSD	SS03A	Soluble	Solid	DI Leach	

Analysis Batch: 50729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-5	SS03A	Soluble	Solid	300.0	50482
890-4451-6	SS04	Soluble	Solid	300.0	50482
890-4451-7	SS05	Soluble	Solid	300.0	50482
890-4451-8	SS06	Soluble	Solid	300.0	50482
890-4451-9	FS01	Soluble	Solid	300.0	50482
890-4451-10	FS02	Soluble	Solid	300.0	50482
890-4451-11	FS03	Soluble	Solid	300.0	50482
890-4451-12	FS04	Soluble	Solid	300.0	50482
890-4451-13	FS05	Soluble	Solid	300.0	50482
890-4451-14	FS06	Soluble	Solid	300.0	50482
MB 880-50482/1-A	Method Blank	Soluble	Solid	300.0	50482
LCS 880-50482/2-A	Lab Control Sample	Soluble	Solid	300.0	50482
LCSD 880-50482/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50482
890-4451-5 MS	SS03A	Soluble	Solid	300.0	50482
890-4451-5 MSD	SS03A	Soluble	Solid	300.0	50482

Analysis Batch: 50736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4451-1	BH01	Soluble	Solid	300.0	50480
890-4451-2	BH01A	Soluble	Solid	300.0	50480
890-4451-3	SS01A	Soluble	Solid	300.0	50480
890-4451-4	SS02A	Soluble	Solid	300.0	50480
MB 880-50480/1-A	Method Blank	Soluble	Solid	300.0	50480
LCS 880-50480/2-A	Lab Control Sample	Soluble	Solid	300.0	50480
LCSD 880-50480/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50480
890-4450-A-5-D MS	Matrix Spike	Soluble	Solid	300.0	50480
890-4450-A-5-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	50480

Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: BH01
Date Collected: 03/30/23 09:55
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 13:02	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 00:26	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	50480	04/06/23 10:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50736	04/08/23 15:16	SMC	EET MID

Client Sample ID: BH01A
Date Collected: 03/30/23 10:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 13:23	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 00:47	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50480	04/06/23 10:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50736	04/08/23 15:20	SMC	EET MID

Client Sample ID: SS01A
Date Collected: 03/30/23 11:40
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 13:43	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 01:29	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50480	04/06/23 10:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50736	04/08/23 15:25	SMC	EET MID

Client Sample ID: SS02A
Date Collected: 03/30/23 11:45
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 14:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS02A
Date Collected: 03/30/23 11:45
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 01:50	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50480	04/06/23 10:17	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50736	04/08/23 15:29	SMC	EET MID

Client Sample ID: SS03A
Date Collected: 03/30/23 11:50
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 02:11	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 11:42	SMC	EET MID

Client Sample ID: SS04
Date Collected: 03/30/23 12:10
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 14:45	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 02:32	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 11:57	SMC	EET MID

Client Sample ID: SS05
Date Collected: 03/30/23 12:15
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 15:06	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 02:54	SM	EET MID

Eurofins Carlsbad

Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: SS05
Date Collected: 03/30/23 12:15
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:02	SMC	EET MID

Client Sample ID: SS06
Date Collected: 03/30/23 12:20
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 15:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/10/23 17:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 03:16	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:06	SMC	EET MID

Client Sample ID: FS01
Date Collected: 03/30/23 14:20
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 16:51	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 03:37	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:11	SMC	EET MID

Client Sample ID: FS02
Date Collected: 03/30/23 14:25
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 17:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 03:58	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:26	SMC	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS03
Date Collected: 03/30/23 14:30
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 17:32	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 04:19	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:31	SMC	EET MID

Client Sample ID: FS04
Date Collected: 03/30/23 14:35
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 17:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/04/23 10:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	50230	04/03/23 15:37	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50110	04/04/23 04:40	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:35	SMC	EET MID

Client Sample ID: FS05
Date Collected: 03/30/23 14:55
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 18:14	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID
Total/NA	Analysis	8015 NM		1			50301	04/05/23 09:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	50296	04/04/23 09:34	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50277	04/04/23 12:19	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:40	SMC	EET MID

Client Sample ID: FS06
Date Collected: 03/30/23 15:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-14
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	50529	04/06/23 15:17	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50770	04/10/23 18:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50857	04/11/23 10:26	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Client Sample ID: FS06

Date Collected: 03/30/23 15:00
Date Received: 03/30/23 16:58

Lab Sample ID: 890-4451-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			50301	04/05/23 09:23	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	50296	04/04/23 09:34	AJ	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	50277	04/04/23 12:41	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	50482	04/06/23 10:18	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50729	04/08/23 12:45	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

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	T104704400-22-25	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 Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	EPA	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 12 Battery

Job ID: 890-4451-1
SDG: 03C1558192

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-4451-1	BH01	Solid	03/30/23 09:55	03/30/23 16:58
890-4451-2	BH01A	Solid	03/30/23 10:00	03/30/23 16:58
890-4451-3	SS01A	Solid	03/30/23 11:40	03/30/23 16:58
890-4451-4	SS02A	Solid	03/30/23 11:45	03/30/23 16:58
890-4451-5	SS03A	Solid	03/30/23 11:50	03/30/23 16:58
890-4451-6	SS04	Solid	03/30/23 12:10	03/30/23 16:58
890-4451-7	SS05	Solid	03/30/23 12:15	03/30/23 16:58
890-4451-8	SS06	Solid	03/30/23 12:20	03/30/23 16:58
890-4451-9	FS01	Solid	03/30/23 14:20	03/30/23 16:58
890-4451-10	FS02	Solid	03/30/23 14:25	03/30/23 16:58
890-4451-11	FS03	Solid	03/30/23 14:30	03/30/23 16:58
890-4451-12	FS04	Solid	03/30/23 14:35	03/30/23 16:58
890-4451-13	FS05	Solid	03/30/23 14:55	03/30/23 16:58
890-4451-14	FS06	Solid	03/30/23 15:00	03/30/23 16:58

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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: 4450

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Project Manager:	Ben Belill	Bill to: (if different)	Garrett 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:	Garrett.Green@ExxonMobil.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU Pierce Canyon 12 Battery	Turn Around	☑ Routine ☐ Rush
Project Number:	03C1558192	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM1007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.4
Total Containers:		Corrected Temperature:	2.2

Preservative Codes

None: NO; DI Water: H_2O; Cool: Cool; MeOH: Me; HCL: HC; HNO_3: HN; H_2S0_4: H_2; NaOH: Na; H_3PO_4: HP; $NaHSO_4$: NABIS; $Na_2S_2O_3$: $NaSO_3$; Zn Acetate+NaOH: Zn; NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)	Sample Comments
BH01	S	3/30/23	955am	.5	G	1		✓	✓	✓	Incident ID:
BH01A			1000am	1	G	1					nAPP2306152871
SS01A			11:40am	1	G	1					
SS02A			1145am	1	G	1					Cost Center:
SS03A			1150am	1	G	1					1081051001
SS04			1210pm	.5	G	1					AFE:
SS05			1215pm	.5	G	1					
SS06			1220pm	.5	G	1					
FS01			2:20pm	1	C	1					
FS02			2:25pm	1	C	1					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3.30.23	2 1658		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 5/4/2023 11:25:50 AM

Released to Imaging: 9/20/2023 8:49:23 AM

4/11/2023

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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 Belill	Bill to: (if different)	Garrett 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:	Garrett.Green@ExxonMobil.com

Work Order Comments

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU Pierce Canyon 12 Battery	Turn Around	☑ Routine ☐ Rush
Project Number:	03C1558192	Due Date:	
Project Location:		TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Connor Whitman		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	NM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	2.4
Total Containers:		Corrected Temperature:	2.2

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)
FS03	S	3/30/23	230pm	1	C	1		✓	✓	✓
FS04			235pm	1	C	1		✓	✓	✓
FS05			255pm	1	C	1		✓	✓	✓
FS06			300pm	1	C	1		✓	✓	✓

Preservative Codes

None: NO — DI Water: H_2O
Cool: Cool — MeOH: Me
HCL: HC — HNO_3: HN
H_2SO_4: H_2 — NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: $NaSO_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Comments

Incident ID:
nAPP2306152871

Cost Center:
1081051001

AFE:

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO_2 Na Sr Tl Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed **TCLP / SPLP 6010**: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		3.30.23 1655	4		
3			6		
5					

Revised Date: 08/25/2020 Rev. 2020.2

Received by OCD: 5/4/2023 11:25:50 AM
Released to Imaging: 9/20/2023 8:49:23 AM

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4451-1
SDG Number: 03C1558192

Login Number: 4451
List Number: 1
Creator: Kramer, Jessica

List Source: Eurofins Carlsbad

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.	True	
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: 890-4451-1
SDG Number: 03C1558192

Login Number: 4451
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 04/03/23 09:29 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	

ENSOLUM

APPENDIX E

NMOCD Notifications

From: Foust, Bryan Jacob
Sent: Wednesday, March 1, 2023 10:07 AM
To: ocd.enviro@emnrd.nm.gov; Robert.Hamlet@emnrd.nm.gov; Bratcher, Michael, EMNRD
Cc: DelawareSpills /SM; Green, Garre J
Subject: XTO - 48 hour liner inspec on no fica on - Poker Lake Unit Pierce Canyon 12 ba ery - released 2/17/2023

Good morning,

This is sent as a 48-hour no fica on. XTO is scheduled to inspect the lined containment at the Poker Lake Unit Pierce Canyon 12 ba ery, released 2/17/2023, on Friday March 3 at 2:00 PM MST. 24 hour no fica on was sent 2/20/2023 at 6:40 AM since release was greater than 25 barrels. Please call us with any ques ons or concerns.

GPS coordinates: 32.22536, -103.93067

Thank you,

Jake Foust
SSHE Coordinator (environmental)
432-266-2663

Ben Belill

From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Thursday, March 23, 2023 9:51 AM
To: Enviro, OCD, EMNRD; Bratcher, Michael, EMNRD; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD
Cc: Ben Belill; DelawareSpills /SM
Subject: XTO - Sampling Notification (Week of 3/27/23 - 3/31/23)

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the sites listed below for the week of Mar 27, 2023.

Tuesday, Mar 28, 2023
- PLU 13 Dog Town Draw Battery / nAPP2304448906
- Nash 53 SWD / NAB1918643207, NRM2022758966, NAPP2102934064, NAPP2100847227, and NAPP2100838523

Wednesday, Mar 29, 2023
- PLU Pierce Canyon 12 Battery / nAPP2306152871
- PLU 13 Dog Town Draw Battery / nAPP2304448906

Thursday, Mar 30, 2023
- PLU Pierce Canyon 12 Battery / nAPP2306152871
- BEU 149 / NAB1814128371
- PLU 15 TWR Battery / nAPP2305833429

Friday, Mar 31, 2023
- PLU 15 TWR Battery / nAPP2305833429
- JRU 21 SWD / nAB1834656162

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

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 213576

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 213576
	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 #NAPP2306152871 PLU PIERCE CANYON 12 BATTERY, thank you. This closure is approved.	9/19/2023