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	NAPP2214734717
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 32.19297 Longitude -103.91889
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Poker Lake Unit 442 443	Site Type Tank Battery
Date Release Discovered 05/15/2022	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
B	30	24S	30E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 50.00	Volume Recovered (bbls) 50.00
☐ 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: Wells were not shut off overnight due to human error, wells unloaded causing tanks to overflow into impermeable containment. All fluids were recovered. A 48-hour liner inspection notice was sent to NMOCD District 2. Liner was inspected and determined not to be operating as designed. A third-party contractor has been retained for remediation purposes.

Form C-141
Page 2

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2214734717
District RP	
Facility ID	
Application ID	

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 Mike Bratcher, Robert Hamlet, ocd.enviro@state.nm.us on Tuesday, May 17, 2022 9:27 AM 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

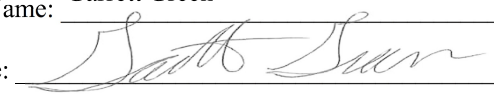
- ☒ The source of the release has been stopped.
- ☒ The impacted area has been secured to protect human health and the environment.
- ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.
- ☒ All free liquids and recoverable materials have 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: 05/27/2022
email: garrett.green@exxonmobil.com
Telephone: 575-200-0729

OCD Only

Received by: Jocelyn Harimon
Date: 05/27/2022

Location:	Poker Lake Unit 442 443 Battery	
Spill Date:	5/15/2022	
Area 1		
Approximate Area =	280.73	cu.ft.
VOLUME OF LEAK		
Total Crude Oil =	50.00	bbls
Total Produced Water =	0.00	bbls
TOTAL VOLUME OF LEAK		
Total Crude Oil =	**50.00**	**bbls**
Total Produced Water =	**0.00**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**50.00**	**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: 111576
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	5/27/2022

Incident ID	NAPP2214734717
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	NAPP2214734717
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: __8/11/2022_____

email: __Garrett.Green@ExxonMobil.com_____ Telephone: ___575-200-0729_____

OCD Only

Received by: __Jocelyn Harimon_____ Date: 08/12/2022

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2214734717
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: __Garret Green_____ Title: ____Environmental Coordinator_____

Signature: _____ Date: ___8/11/2022_____

email: ____Garrett.Green@ExxonMobil.com_____ Telephone: __575-200-0729_____

OCD Only

Received by: Jocelyn Harimon Date: 08/12/2022

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: Jennifer Nobui Date: 09/29/2022

Printed Name: Jennifer Nobui Title: Environmental Specialist A

ENSOLUM

August 11, 2022

District II
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210

Re: Closure Request
Poker Lake Unit 442 443
Incident Number NAPP2214734717
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this Closure Request to document site assessment and soil sampling activities at the Poker Lake Unit 442 443 (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of crude oil within lined containment at the Site. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request for Incident Number NAPP2214734717.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit B, Section 30, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.19297° N, 103.91889°W) and is associated with oil and gas exploration and production operations on Federal Land managed by Bureau of Land Management (BLM).

On May 15, 2022, due to human error, wells unloaded and caused tanks to overflow, resulting in the release of approximately 50 barrels (bbls) of crude oil into the lined tank battery containment. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; all 50 bbls of released crude oil were recovered from within the lined containment. A 48-hour advance notice of liner inspection was provided via email to the New Mexico Oil Conservation Division (NMOCD) District II office. A liner integrity inspection was conducted by XTO personnel following fluid recovery. Upon inspection, the liner was determined to be insufficient. XTO reported the release to the NMOCD via email on May 17, 2022 and submitted a Release Notification Form C-141 (Form C-141) on May 27, 2022. The release was assigned Incident Number NAPP2214734717.

SITE CHARATERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) 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. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 321205103544701, located approximately 0.6 miles north of the Site. The groundwater well has a reported depth to groundwater of 231 feet bgs and a total depth of 452 feet bgs. Ground surface elevation at the groundwater well location is 3,188 feet above mean sea level (amsl), which is approximately 30 feet higher in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is Pierce Canyon, located approximately 803 feet south of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet 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). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table 1 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

SITE ASSESSMENT ACTIVITIES

On July 11, 2022, Ensolum personnel visited the Site to evaluate the release extent and conduct site assessment activities. One borehole (BH01) was advanced via hand auger near the location of the tear in the liner to assess the vertical extent of impacted soil. Three delineation soil samples (BH01/BH01A/BH01B) were collected from the borehole at depths of approximately 0.5 feet, 1-foot, and 2 feet bgs, respectively, before encountering auger refusal. Four additional lateral delineation soil samples (SS01 through SS04) were collected around the lined containment at a depth of 0.5 feet bgs to confirm the lateral extent of the release. Soil from the delineation soil sample locations was field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Field screening results and observations from the borehole were documented on lithologic/soil sampling logs, which are included as Appendix B. The borehole was backfilled with the soil removed and XTO repaired the tear in the liner. The delineation soil sample locations are depicted on Figure 2. Photographic documentation is included in Appendix C.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody (COC) procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the delineation soil samples BH01, BH01A, and BH01B collected from the borehole and lateral delineation soil samples SS01 through SS04 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Following the failed liner integrity inspection at the Site, Ensolum personnel advanced one borehole (BH01) within the lined containment to assess for the presence or absence of impacted soil resulting from the May 15, 2022 crude oil release within lined containment. Three delineation soil samples were collected from borehole BH01, at depths of approximately 0.5 feet, 1-foot, and 2 feet bgs. Laboratory analytical results for the delineation soil samples BH01, BH01A, and BH01B collected from the borehole, and lateral delineation soil samples SS01 through SS04 indicated benzene, BTEX, TPH-DRO/TPH-GRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria and compliant with the most stringent Table 1 Closure Criteria. The release was contained laterally by the lined containment and all released fluids were recovered during initial response activities. The tear in the liner was subsequently repaired.

Based on initial response efforts, absence of elevated field screening results, and soil sample laboratory analytical results compliant with the Closure Criteria directly beneath the tear in the liner, XTO respectfully requests no further action for Incident Number NAPP2214734717.

If you have any questions or comments, please contact Ms. Ashley Ager at (970) 946-1093 or aager@ensolum.com.

Sincerely,
Ensolum, LLC

Kalei Jennings
Senior Scientist

Ashley L. Ager, M.S., P.G.
Program Director

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

Appendices:

Figure 1	Site Receptor Map
Figure 2	Delineation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Referenced Well Records
Appendix B	Lithologic / Soil Sampling Logs
Appendix C	Photographic Log

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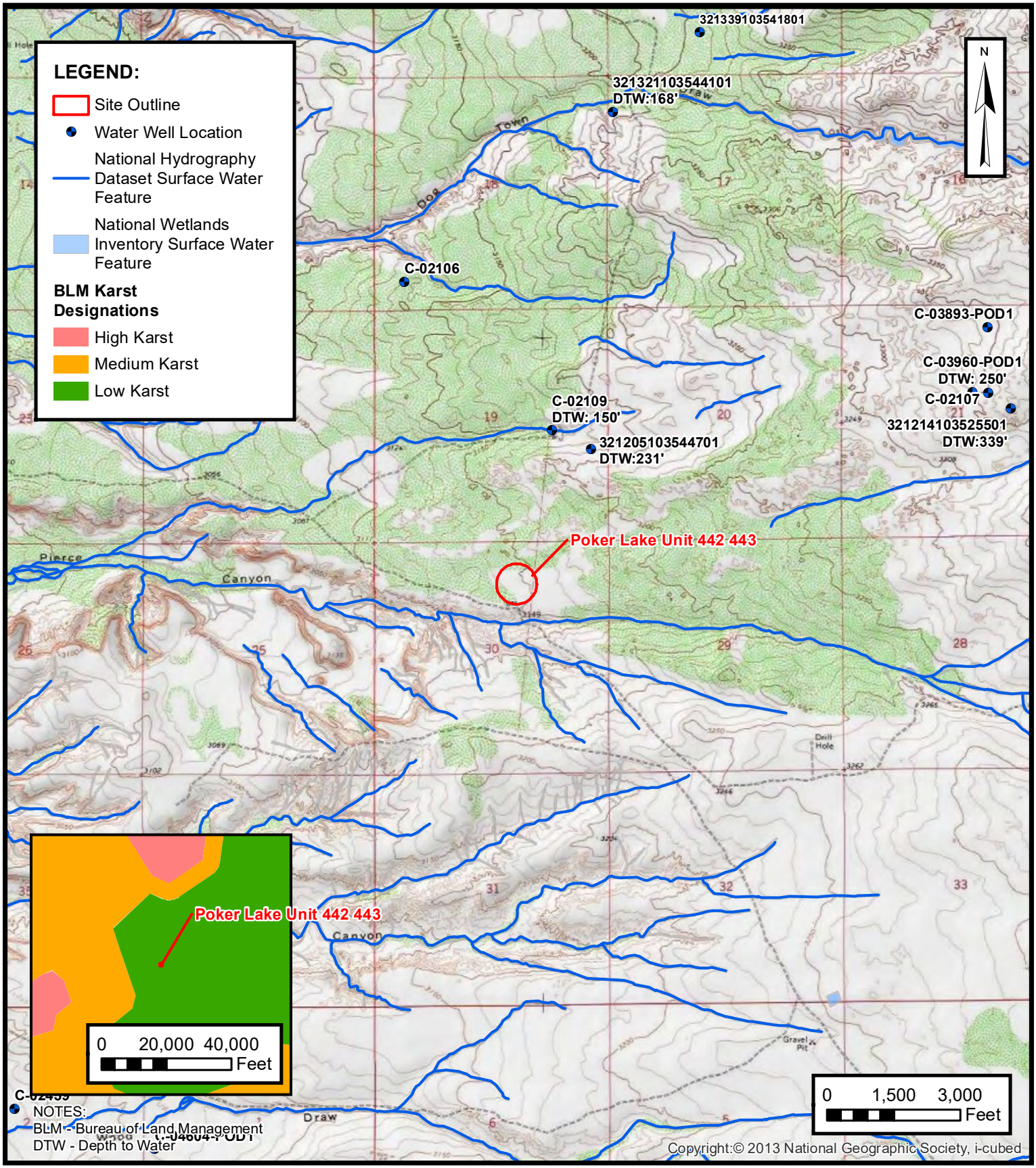
FIGURES

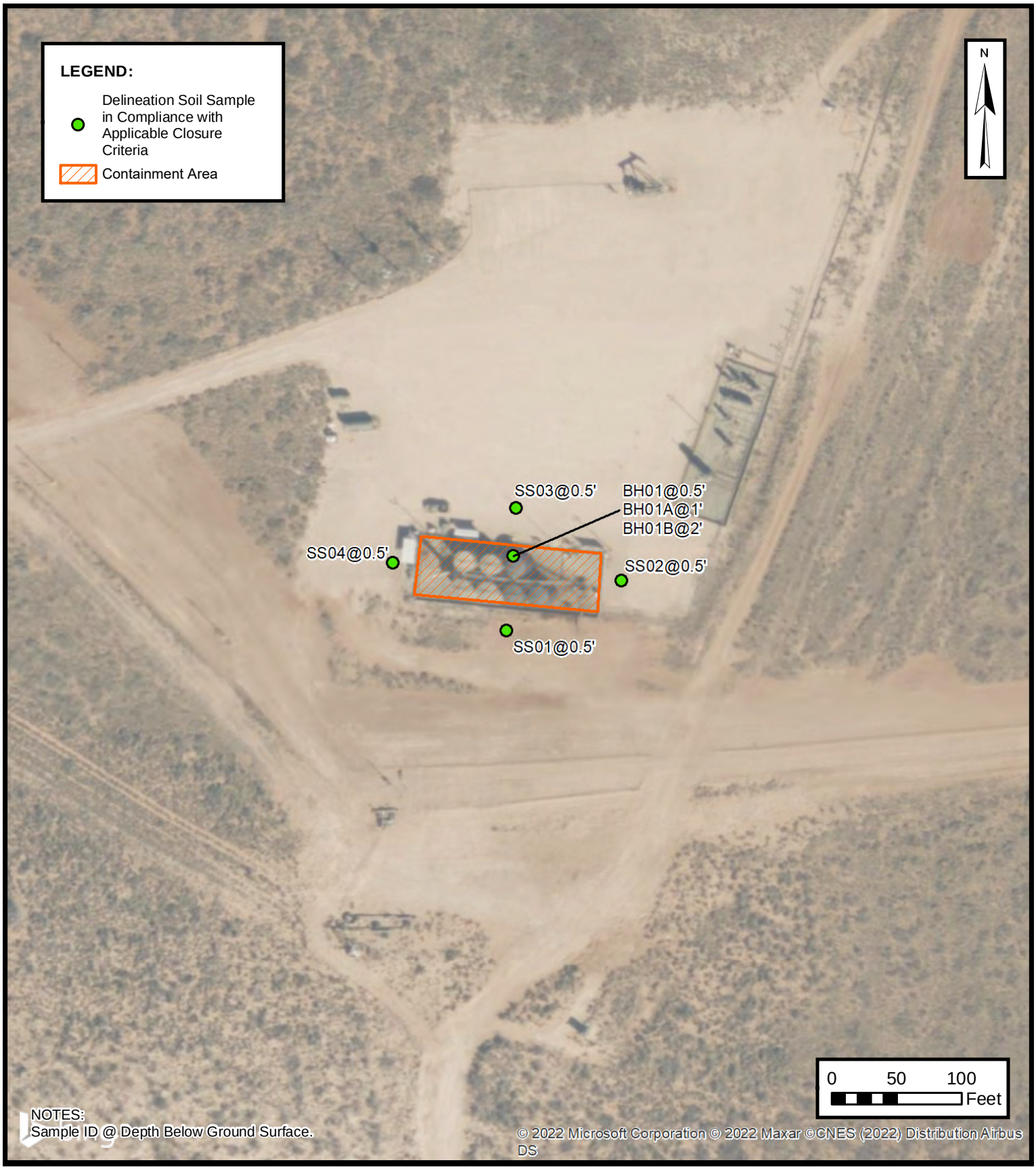


ENSOLUM
Environmental & Hydrogeologic Consultants

SITE RECEPTOR MAP

XTO ENERGY, INC
POKER LAKE UNIT 442 443
NAPP2214734717
Unit B, Section 30, Township 24S, Range 30E
Eddy County, New Mexico

FIGURE
1



ENSOLUM
Environmental & Hydrogeologic Consultants

DELINEATION SOIL SAMPLES

XTO ENERGY, INC
POKER LAKE UNIT 442 443
NAPP2214734717
Unit B, Section 30, Township 24S, Range 30E
Eddy County, New Mexico

FIGURE

2

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TABLES

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
XTO Energy, Inc - Poker Lake Unit 442 443
Eddy County, New Mexico
Incident No. NAPP2214734717

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)			**10**	**50**	NE	NE	NE	**1,000**	**2,500**	**20,000**
Delineation Soil Sample Analytical Results										
SS01	07/11/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	36.5
SS02	07/11/2022	0.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	6.10
SS03	07/11/2022	0.5	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	<5.00
SS04	07/11/2022	0.5	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	17.6
BH01	07/11/2022	0.5	<0.00202	<0.00404	<50.0	80.4	<50.0	80.4	80.4	26.3
BH01A	07/11/2022	1	<0.00201	<0.00402	<50.0	83.2	<50.0	83.2	83.2	20.1
BH01B	07/11/2022	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	37.4

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Concentrations in **bold** exceed the NMOCD Table 1 Closure Criteria for Soils Impacted by a Release

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APPENDIX A

Well Record and Log

National Water Information System: Web Interface

USGS Water Resources

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

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- Full News

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

site_no list =

- 321205103544701

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

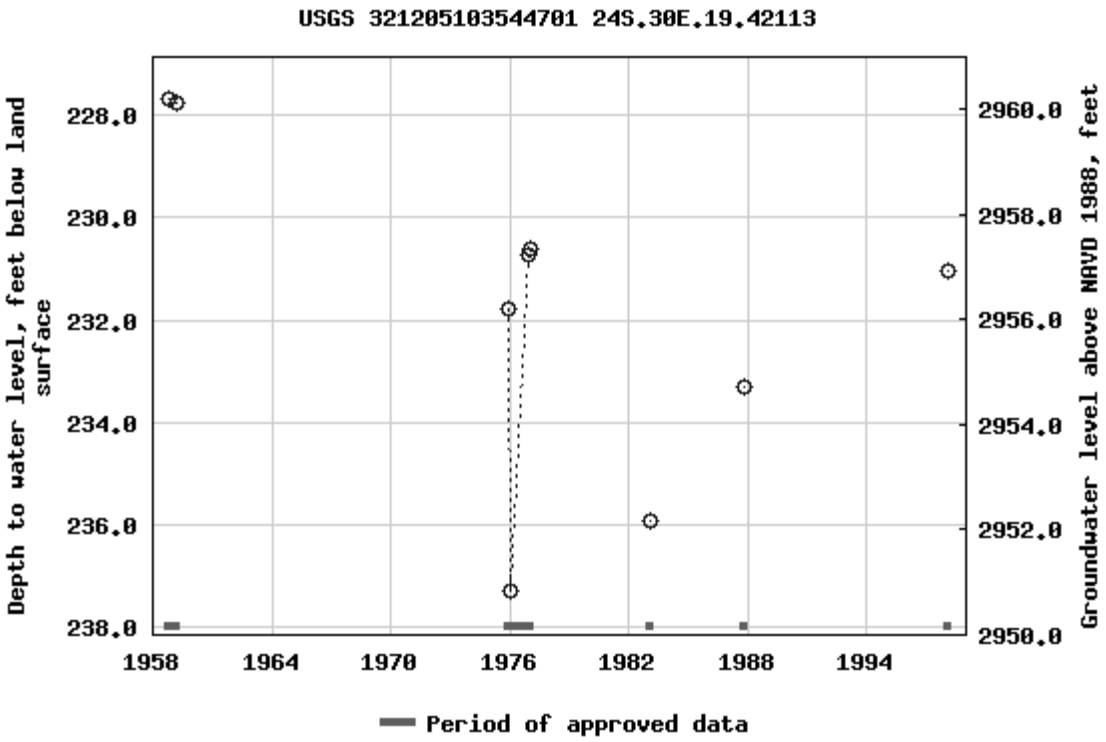
USGS 321205103544701 24S.30E.19.42113

Available data for this site | Groundwater: Field measurements | GO

Eddy County, New Mexico
Hydrologic Unit Code 13060011
Latitude 32°12'05", Longitude 103°54'47" NAD27
Land-surface elevation 3,188 feet above NAVD88
The depth of the well is 452 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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



Breaks in the plot represent a gap of at least one year between field measurements.
Download a presentation-quality graph

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

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- 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 =
- 321205103544701

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

USGS 321205103544701 24S.30E.19.42113

Eddy County, New Mexico
Latitude 32°12'05", Longitude 103°54'47" NAD27
Land-surface elevation 3,188 feet above NAVD88
The depth of the well is 452 feet below land surface.
This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.
This well is completed in the Rustler Formation (312RSLR) local aquifer.

Output formats

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 measu
1958-10-24		D	62610		2958.66	NGVD29	1	Z		
1958-10-24		D	62611		2960.30	NAVD88	1	Z		
1958-10-24		D	72019	227.70			1	Z		
1959-03-19		D	62610		2958.61	NGVD29	1	Z		
1959-03-19		D	62611		2960.25	NAVD88	1	Z		
1959-03-19		D	72019	227.75			1	Z		
1975-12-10		D	62610		2954.58	NGVD29	1	Z		
1975-12-10		D	62611		2956.22	NAVD88	1	Z		
1975-12-10		D	72019	231.78			1	Z		
1976-01-16		D	62610		2949.10	NGVD29	1	Z		
1976-01-16		D	62611		2950.74	NAVD88	1	Z		
1976-01-16		D	72019	237.26			1	Z		
1976-12-01		D	62610		2955.63	NGVD29	1	Z		
1976-12-01		D	62611		2957.27	NAVD88	1	Z		
1976-12-01		D	72019	230.73			1	Z		
1977-01-14		D	62610		2955.74	NGVD29	1	Z		

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 measu
1977-01-14		D	62611		2957.38	NAVD88	1	Z		
1977-01-14		D	72019	230.62			1	Z		
1983-02-01		D	62610		2950.43	NGVD29	1	Z		
1983-02-01		D	62611		2952.07	NAVD88	1	Z		
1983-02-01		D	72019	235.93			1	Z		
1987-10-15		D	62610		2953.06	NGVD29	1	S		
1987-10-15		D	62611		2954.70	NAVD88	1	S		
1987-10-15		D	72019	233.30			1	S		
1998-01-27		D	62610		2955.34	NGVD29	1	S		
1998-01-27		D	62611		2956.98	NAVD88	1	S		
1998-01-27		D	72019	231.02			1	S		

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.

New Mexico Office of the State Engineer

Point of Diversion Summary

(quarters are 1=NW 2=NE 3=SW 4=SE)
(quarters are smallest to largest) (NAD83 UTM in meters)

Well Tag	POD Number	Q64	Q16	Q4	Sec	Tws	Rng	X	Y
	C 02109	1	2	4	19	24S	30E	602130	3563412

Driller License: **Driller Company:**

Driller Name: UNKNOWN

Drill Start Date:		**Drill Finish Date:**	12/31/1963	**Plug Date:**	
Log File Date:		**PCW Rcv Date:**		**Source:**	
Pump Type:		**Pipe Discharge Size:**		**Estimated Yield:**	40 GPM
Casing Size:	7.00	**Depth Well:**	130 feet	**Depth Water:**	150 feet

ENSOLUM

APPENDIX B

Lithologic Soil Sampling Logs

ENSOLUM

	Sample Name: **BH01**	Date: **07/11/2022**
	Site Name: **Poker Lake Unit 442 443**	
	Incident Number: **NAPP2214734717**	
	Job Number: 03E1558067	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: CS	Method: **Hand-Auger**
Coordinates: 32.193028, -103.918906	Hole Diameter: NA	Total Depth: **2'**

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
D	<168	0.8	N	BH01	0.5	0.5	CCHE	light brown to reddish sandstone, poorly graded sand, non-cohesive, no odor, no staining.
D	<168	0.8	N	BH01A	1	1	CCHE	SAA.
D	<168	0.3	N	BH01B	2	2	CCHE	SAA.

TD @ 2 feet bgs

ENSOLUM

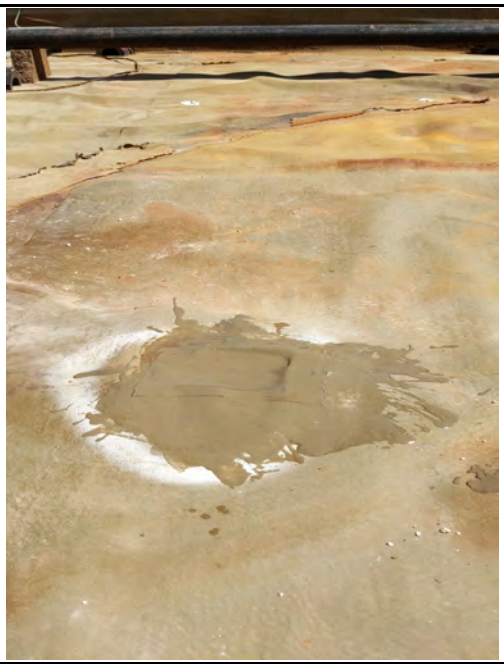
APPENDIX C

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc.
Poker Lake Unit 442 443
Incident Number NAPP2214734717

Photograph 1
Date: July 11 2022
Description: View of BH01 location prior to delineation activities.



Photograph 2
Date: July 11, 2022
Description: View of patched liner once delineation activities were completed.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

eurofins | Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2530-1
Laboratory Sample Delivery Group: 03E1558067
Client Project/Site: PLU 442 443 Battery

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
7/18/2022 12:03:25 PM

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

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

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

Client: Ensolum
Project/Site: PLU 442 443 Battery

Laboratory Job ID: 890-2530-1
SDG: 03E1558067

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Job ID: 890-2530-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2530-1

Receipt
The sample was received on 7/11/2022 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29652 and analytical batch 880-29696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Client Sample ID: SS01

Date Collected: 07/11/22 10:00
Date Received: 07/11/22 15:18
Sample Depth: 0.5'

Lab Sample ID: 890-2530-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 17:00	07/14/22 19:43	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 17:00	07/14/22 19:43	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 17:00	07/14/22 19:43	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 17:00	07/14/22 19:43	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 17:00	07/14/22 19:43	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 17:00	07/14/22 19:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*128*		*70 - 130*	*07/14/22 17:00*	*07/14/22 19:43*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 17:00*	*07/14/22 19:43*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/14/22 20:21	1

Method: 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			07/15/22 10:26	1

Method: 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		07/13/22 11:07	07/14/22 15:44	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		07/13/22 11:07	07/14/22 15:44	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/13/22 11:07	07/14/22 15:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/13/22 11:07*	*07/14/22 15:44*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/13/22 11:07*	*07/14/22 15:44*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**36.5**		4.96		mg/Kg			07/16/22 10:16	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2530-1	SS01	128	97
890-2547-A-3-D MS	Matrix Spike	99	100
890-2547-A-3-E MSD	Matrix Spike Duplicate	122	93
LCS 880-29702/1-A	Lab Control Sample	97	100
LCSD 880-29702/2-A	Lab Control Sample Dup	112	100
MB 880-29702/5-A	Method Blank	108	107

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)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-16861-A-1-B MS	Matrix Spike	89	83
880-16861-A-1-C MSD	Matrix Spike Duplicate	81	73
890-2530-1	SS01	85	88
LCS 880-29652/2-A	Lab Control Sample	120	102
LCSD 880-29652/3-A	Lab Control Sample Dup	124	108
MB 880-29652/1-A	Method Blank	86	95

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29702/5-A
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29702

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 08:03	07/14/22 12:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 08:03	07/14/22 12:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 08:03	07/14/22 12:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 08:03	07/14/22 12:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 08:03	07/14/22 12:04	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 08:03	07/14/22 12:04	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/14/22 08:03*	*07/14/22 12:04*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*07/14/22 08:03*	*07/14/22 12:04*	*1*

Lab Sample ID: LCS 880-29702/1-A
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29702

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1064		mg/Kg		106	70 - 130		
Toluene			0.100	0.1020		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.09099		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1833		mg/Kg		92	70 - 130		
o-Xylene			0.100	0.09664		mg/Kg		97	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: LCSD 880-29702/2-A
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29702

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.09913		mg/Kg		99	70 - 130	7	35
Toluene			0.100	0.1079		mg/Kg		108	70 - 130	6	35
Ethylbenzene			0.100	0.1025		mg/Kg		103	70 - 130	12	35
m-Xylene & p-Xylene			0.200	0.2143		mg/Kg		107	70 - 130	16	35
o-Xylene			0.100	0.1126		mg/Kg		113	70 - 130	15	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2547-A-3-D MS
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29702

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00201	U	0.100	0.1050		mg/Kg		104	70 - 130		
Toluene	<0.00201	U	0.100	0.1012		mg/Kg		101	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

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

Lab Sample ID: 890-2547-A-3-D MS
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29702

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U	0.100	0.09086		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1839		mg/Kg		92	70 - 130
o-Xylene	<0.00201	U	0.100	0.09733		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*

Lab Sample ID: 890-2547-A-3-E MSD
Matrix: Solid
Analysis Batch: 29701

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 29702

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0998	0.08676		mg/Kg		86	70 - 130	19	35
Toluene	<0.00201	U	0.0998	0.1094		mg/Kg		110	70 - 130	8	35
Ethylbenzene	<0.00201	U	0.0998	0.1090		mg/Kg		109	70 - 130	18	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.2345		mg/Kg		117	70 - 130	24	35
o-Xylene	<0.00201	U	0.0998	0.1239		mg/Kg		124	70 - 130	24	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

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

Lab Sample ID: MB 880-29652/1-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29652

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		07/13/22 11:06	07/14/22 11:11	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*

Lab Sample ID: LCS 880-29652/2-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

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

Lab Sample ID: LCS 880-29652/2-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29652

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	120		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: LCSD 880-29652/3-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1142		mg/Kg		114	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 880-16861-A-1-B MS
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	53.9		996	1119		mg/Kg		107	70 - 130
Diesel Range Organics (Over C10-C28)	833	*- F1	996	1277	F1	mg/Kg		45	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: 880-16861-A-1-C MSD
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 29652

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	53.9		998	1024		mg/Kg		97	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	833	*- F1	998	1145	F1	mg/Kg		31	70 - 130	11	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	73		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29659/1-A
Matrix: Solid
Analysis Batch: 29860

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			07/16/22 09:49	1

Lab Sample ID: LCS 880-29659/2-A
Matrix: Solid
Analysis Batch: 29860

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-29659/3-A
Matrix: Solid
Analysis Batch: 29860

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	263.3		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-2530-1 MS
Matrix: Solid
Analysis Batch: 29860

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		248	305.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-2530-1 MSD
Matrix: Solid
Analysis Batch: 29860

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		248	308.1		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

GC VOA

Analysis Batch: 29701

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	8021B	29702
MB 880-29702/5-A	Method Blank	Total/NA	Solid	8021B	29702
LCS 880-29702/1-A	Lab Control Sample	Total/NA	Solid	8021B	29702
LCSD 880-29702/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29702
890-2547-A-3-D MS	Matrix Spike	Total/NA	Solid	8021B	29702
890-2547-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29702

Prep Batch: 29702

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	5035	
MB 880-29702/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29702/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29702/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2547-A-3-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2547-A-3-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 29780

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 29652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 29696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	8015B NM	29652
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015B NM	29652
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29652
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29652
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	29652
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	29652

Analysis Batch: 29838

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 29659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Soluble	Solid	DI Leach	
MB 880-29659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

HPLC/IC (Continued)

Leach Batch: 29659 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1 MS	SS01	Soluble	Solid	DI Leach	
890-2530-1 MSD	SS01	Soluble	Solid	DI Leach	

Analysis Batch: 29860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2530-1	SS01	Soluble	Solid	300.0	29659
MB 880-29659/1-A	Method Blank	Soluble	Solid	300.0	29659
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	300.0	29659
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29659
890-2530-1 MS	SS01	Soluble	Solid	300.0	29659
890-2530-1 MSD	SS01	Soluble	Solid	300.0	29659

Lab Chronicle

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Client Sample ID: SS01

Date Collected: 07/11/22 10:00
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2530-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29702	07/14/22 17:00	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29701	07/14/22 19:43	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29780	07/14/22 20:21	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29838	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 15:44	AJ	XEN MID
Soluble	Leach	DI Leach			5.04 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 10:16	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2530-1
SDG: 03E1558067

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2530-1	SS01	Solid	07/11/22 10:00	07/11/22 15:18	0.5'

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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, LLC	Company Name:	XTO Energy, Inc.
Address:	3122 National parks Hwy	Address:	3104 E. Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	bbelill@ensolum.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 442 443 Battery	**Turn Around**	
Project Number:	03E1558067	☑ Routine ☐ Rush	
Project Location:	EDDY COUNTY, NM	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TAM-007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

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 Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)	Sample Comments
SS01	S	7/11/2022	1000	0.5'	Grab/	1		X	X	X	Cost Center:1081181001

INCIDENT NUMBER: NAPP2214734717

890-2530 Chain of Custody

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Sloat	7/11/22 1518			
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-837 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2530-1
Address: 1211 W Florida Ave	Due Date Requested: 7/15/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 442 443 Battery	Project #: 89000093			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS01 (890-2530-1)	7/11/22	10 00 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Clue			JKramer	7/13/22 1100	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2530-1
SDG Number: 03E1558067

Login Number: 2530
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2530-1
SDG Number: 03E1558067

Login Number: 2530
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 07/13/22 11:52 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.	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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2532-1
Laboratory Sample Delivery Group: 03E1558067
Client Project/Site: PLU 442 443 Battery

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
7/18/2022 2:59:11 PM

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

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

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

Client: Ensolum
Project/Site: PLU 442 443 Battery

Laboratory Job ID: 890-2532-1
SDG: 03E1558067

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Job ID: 890-2532-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2532-1

Receipt
The sample was received on 7/11/2022 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29652 and analytical batch 880-29696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Client Sample ID: SS03

Date Collected: 07/11/22 10:25
Date Received: 07/11/22 15:18
Sample Depth: 0.5'

Lab Sample ID: 890-2532-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 08:58	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 08:58	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 08:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/14/22 13:24	07/16/22 08:58	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 08:58	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/14/22 13:24	07/16/22 08:58	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*70 - 130*	*07/14/22 13:24*	*07/16/22 08:58*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 13:24*	*07/16/22 08:58*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399		mg/Kg			07/18/22 13:45	1

Method: 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			07/15/22 10:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 16:05	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		07/13/22 11:07	07/14/22 16:05	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 16:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*81*		*70 - 130*	*07/13/22 11:07*	*07/14/22 16:05*	*1*
o-Terphenyl	*83*		*70 - 130*	*07/13/22 11:07*	*07/14/22 16:05*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 10:44	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16752-A-2-C MS	Matrix Spike	107	99										
880-16752-A-2-D MSD	Matrix Spike Duplicate	105	101										
890-2532-1	SS03	104	96										
LCS 880-29759/1-A	Lab Control Sample	110	90										
LCSD 880-29759/2-A	Lab Control Sample Dup	105	93										
MB 880-29759/5-A	Method Blank	96	97										
MB 880-29770/5-A	Method Blank	97	96										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16861-A-1-B MS	Matrix Spike	89	83										
880-16861-A-1-C MSD	Matrix Spike Duplicate	81	73										
890-2532-1	SS03	81	83										
LCS 880-29652/2-A	Lab Control Sample	120	102										
LCSD 880-29652/3-A	Lab Control Sample Dup	124	108										
MB 880-29652/1-A	Method Blank	86	95										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29759/5-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29759

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*

Lab Sample ID: LCS 880-29759/1-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07297		mg/Kg		73	70 - 130		
Toluene			0.100	0.08701		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08425		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1807		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09822		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-29759/2-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08688		mg/Kg		87	70 - 130	17	35
Toluene			0.100	0.08609		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.08616		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1801		mg/Kg		90	70 - 130	0	35
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-16752-A-2-C MS
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.100	0.08763		mg/Kg		87	70 - 130		

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

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

Lab Sample ID: 880-16752-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08749		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1846		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.100	0.1009		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-16752-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.1046		mg/Kg		105	70 - 130	14	35
Toluene	<0.00199	U	0.0998	0.1012		mg/Kg		101	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0998	0.09569		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1992		mg/Kg		100	70 - 130	8	35
o-Xylene	<0.00199	U	0.0998	0.1064		mg/Kg		107	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-29770/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29770**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

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

Lab Sample ID: MB 880-29652/1-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29652

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		07/13/22 11:06	07/14/22 11:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*

Lab Sample ID: LCS 880-29652/2-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-29652/3-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1142		mg/Kg		114	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 880-16861-A-1-B MS
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	53.9		996	1119		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)	833	*- F1	996	1277	F1	mg/Kg		45	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

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

Lab Sample ID: 880-16861-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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	53.9		998	1024		mg/Kg		97	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	833	*- F1	998	1145	F1	mg/Kg		31	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29659/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 09:49	1

Lab Sample ID: LCS 880-29659/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-29659/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-2530-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		248	305.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-2530-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		248	308.1		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

GC VOA

Prep Batch: 29759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	5035	
MB 880-29759/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 29770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29770/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 29845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	8021B	29759
MB 880-29759/5-A	Method Blank	Total/NA	Solid	8021B	29759
MB 880-29770/5-A	Method Blank	Total/NA	Solid	8021B	29770
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	8021B	29759
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29759
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	29759
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29759

Analysis Batch: 29955

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 29652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 29696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	8015B NM	29652
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015B NM	29652
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29652
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29652
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	29652
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	29652

Analysis Batch: 29839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

HPLC/IC

Leach Batch: 29659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Soluble	Solid	DI Leach	
MB 880-29659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 29860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2532-1	SS03	Soluble	Solid	300.0	29659
MB 880-29659/1-A	Method Blank	Soluble	Solid	300.0	29659
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	300.0	29659
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29659
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	29659
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	29659

Lab Chronicle

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Client Sample ID: SS03
Date Collected: 07/11/22 10:25
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2532-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 08:58	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29955	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29839	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 16:05	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 10:44	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2532-1
SDG: 03E1558067

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2532-1	SS03	Solid	07/11/22 10:25	07/11/22 15:18	0.5'

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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, LLC	Company Name:	XTO Energy, Inc.
Address:	3122 National parks Hwy	Address:	3104 E. Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	bbelill@ensolum.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 442 443 Battery	**Turn Around**	
Project Number:	03E1558067	☑ Routine ☐ Rush	
Project Location:	EDDY COUNTY, NM	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes (No)	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TAM-807	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.3	
Total Containers:		Corrected Temperature:	5.5	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS03	S	7/11/2022	1095	0.5'	Grab/	1		X	X	X

890-2532 Chain of Custody

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 Comments

Cost Center:1081181001

INCIDENT NUMBER: NAPP2214734717

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Stuf	7/11/22 1518	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-837 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2532-1
Address: 1211 W Florida Ave	Due Date Requested: 7/15/2022			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 442 443 Battery	Project #: 89000093			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B - NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5036FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
SS03 (890-2532-1)	7/11/22	10 25 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements.

Empty Kit Relinquished by	Date	Time.	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Cloe			Kramer	7/13.22 1100	
2						
3						

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2532-1
SDG Number: 03E1558067

Login Number: 2532
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2532-1
SDG Number: 03E1558067

Login Number: 2532
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 07/13/22 11:52 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.	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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2534-1
Laboratory Sample Delivery Group: 03E1558067
Client Project/Site: PLU 442 443 Battery

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
7/18/2022 2:59:28 PM

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

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

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

Client: Ensolum
Project/Site: PLU 442 443 Battery

Laboratory Job ID: 890-2534-1
SDG: 03E1558067

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Job ID: 890-2534-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2534-1

Receipt
The sample was received on 7/11/2022 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29652 and analytical batch 880-29696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Client Sample ID: SS02

Date Collected: 07/11/22 10:05
Date Received: 07/11/22 15:18
Sample Depth: 0.5'

Lab Sample ID: 890-2534-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/14/22 13:24	07/16/22 09:19	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/14/22 13:24	07/16/22 09:19	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/14/22 13:24	07/16/22 09:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/14/22 13:24	07/16/22 09:19	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/14/22 13:24	07/16/22 09:19	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/14/22 13:24	07/16/22 09:19	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*70 - 130*	*07/14/22 13:24*	*07/16/22 09:19*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 13:24*	*07/16/22 09:19*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398		mg/Kg			07/18/22 13:45	1

Method: 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			07/15/22 10:26	1

Method: 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		07/13/22 11:07	07/14/22 17:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		07/13/22 11:07	07/14/22 17:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/13/22 11:07	07/14/22 17:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*84*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:11*	*1*
o-Terphenyl	*83*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:11*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**6.10**		4.99		mg/Kg			07/16/22 10:53	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16752-A-2-C MS	Matrix Spike	107	99										
880-16752-A-2-D MSD	Matrix Spike Duplicate	105	101										
890-2534-1	SS02	108	97										
LCS 880-29759/1-A	Lab Control Sample	110	90										
LCSD 880-29759/2-A	Lab Control Sample Dup	105	93										
MB 880-29759/5-A	Method Blank	96	97										
MB 880-29770/5-A	Method Blank	97	96										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16861-A-1-B MS	Matrix Spike	89	83										
880-16861-A-1-C MSD	Matrix Spike Duplicate	81	73										
890-2534-1	SS02	84	83										
LCS 880-29652/2-A	Lab Control Sample	120	102										
LCSD 880-29652/3-A	Lab Control Sample Dup	124	108										
MB 880-29652/1-A	Method Blank	86	95										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29759/5-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29759

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*

Lab Sample ID: LCS 880-29759/1-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07297		mg/Kg		73	70 - 130		
Toluene			0.100	0.08701		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08425		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1807		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09822		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-29759/2-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08688		mg/Kg		87	70 - 130	17	35
Toluene			0.100	0.08609		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.08616		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1801		mg/Kg		90	70 - 130	0	35
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-16752-A-2-C MS
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.100	0.08763		mg/Kg		87	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

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

Lab Sample ID: 880-16752-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08749		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1846		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.100	0.1009		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-16752-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.1046		mg/Kg		105	70 - 130	14	35
Toluene	<0.00199	U	0.0998	0.1012		mg/Kg		101	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0998	0.09569		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1992		mg/Kg		100	70 - 130	8	35
o-Xylene	<0.00199	U	0.0998	0.1064		mg/Kg		107	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-29770/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29770**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

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

Lab Sample ID: MB 880-29652/1-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29652

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		07/13/22 11:06	07/14/22 11:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*

Lab Sample ID: LCS 880-29652/2-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-29652/3-A
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29652

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1142		mg/Kg		114	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 880-16861-A-1-B MS
Matrix: Solid
Analysis Batch: 29696

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29652

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	53.9		996	1119		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)	833	*- F1	996	1277	F1	mg/Kg		45	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

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

Lab Sample ID: 880-16861-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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	53.9		998	1024		mg/Kg		97	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	833	*- F1	998	1145	F1	mg/Kg		31	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29659/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 09:49	1

Lab Sample ID: LCS 880-29659/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-29659/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-2530-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		248	305.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-2530-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		248	308.1		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

GC VOA

Prep Batch: 29759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	5035	
MB 880-29759/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 29770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29770/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 29845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	8021B	29759
MB 880-29759/5-A	Method Blank	Total/NA	Solid	8021B	29759
MB 880-29770/5-A	Method Blank	Total/NA	Solid	8021B	29770
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	8021B	29759
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29759
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	29759
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29759

Analysis Batch: 29956

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 29652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	8015NM Prep	
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 29696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	8015B NM	29652
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015B NM	29652
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29652
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29652
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	29652
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	29652

Analysis Batch: 29840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

HPLC/IC

Leach Batch: 29659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Soluble	Solid	DI Leach	
MB 880-29659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 29860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2534-1	SS02	Soluble	Solid	300.0	29659
MB 880-29659/1-A	Method Blank	Soluble	Solid	300.0	29659
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	300.0	29659
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29659
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	29659
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	29659

Lab Chronicle

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Client Sample ID: SS02

Date Collected: 07/11/22 10:05
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2534-1

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			5.03 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 09:19	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29956	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29840	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 17:11	AJ	XEN MID
Soluble	Leach	DI Leach			5.01 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 10:53	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2534-1
SDG: 03E1558067

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2534-1	SS02	Solid	07/11/22 10:05	07/11/22 15:18	0.5'

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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, LLC	Company Name:	XTO Energy, Inc.
Address:	3122 National parks Hwy	Address:	3104 E. Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	bbelill@ensolum.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 442 443 Battery	Turn Around	☑ Routine ☐ Rush
Project Number:	03E1558067	Due Date:	
Project Location:	EDDY COUNTY, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT				
Temp Blank:	Yes No	Wet Ice:	Yes No	
Samples Received Intact:	Yes No	Thermometer ID:	Tem-007	
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
SS02	S	7/11/2022	1005	0.5'	Grab/	1		X	X	X

890-2534 Chain of Custody

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 Comments

Cost Center:1081181001

INCIDENT NUMBER: NAPP2214734717

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Stutz	7/11/22 1518	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev: 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax: 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-837 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2534-1
Address: 1211 W Florida Ave	Due Date Requested: 7/15/2022			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 442 443 Battery	Project #: 89000093			
Site	SSOW#:			

Analysis Requested

Preservation Codes

A HCL, B NaOH, C - Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O AsNaO2, P Na2O4S, Q Na2SO3, R Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS02 (890-2534-1)	7/11/22	10 05 Mountain		Solid			X	X	X	X	X	1	

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Cloe			Kramer	7/13/22	
2						
3						

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2534-1
SDG Number: 03E1558067

Login Number: 2534
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2534-1
SDG Number: 03E1558067

Login Number: 2534
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 07/13/22 11:52 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.	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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2535-1
Laboratory Sample Delivery Group: 03E1558067
Client Project/Site: PLU 442 443 Battery

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
7/18/2022 3:00:08 PM

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

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

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

Client: Ensolum
Project/Site: PLU 442 443 Battery

Laboratory Job ID: 890-2535-1
SDG: 03E1558067

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Job ID: 890-2535-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2535-1

Receipt
The sample was received on 7/11/2022 3:18 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29652 and analytical batch 880-29696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Client Sample ID: SS04

Date Collected: 07/11/22 10:30
Date Received: 07/11/22 15:18
Sample Depth: 0.5'

Lab Sample ID: 890-2535-1

Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 09:39	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 09:39	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 09:39	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 13:24	07/16/22 09:39	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 09:39	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 13:24	07/16/22 09:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/14/22 13:24*	*07/16/22 09:39*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*07/14/22 13:24*	*07/16/22 09:39*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/18/22 13:45	1

Method: 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			07/15/22 10:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:33	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:33	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:33*	*1*
o-Terphenyl	*88*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:33*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17.6**		4.95		mg/Kg			07/16/22 11:02	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16752-A-2-C MS	Matrix Spike	107	99										
880-16752-A-2-D MSD	Matrix Spike Duplicate	105	101										
890-2535-1	SS04	107	95										
LCS 880-29759/1-A	Lab Control Sample	110	90										
LCSD 880-29759/2-A	Lab Control Sample Dup	105	93										
MB 880-29759/5-A	Method Blank	96	97										
MB 880-29770/5-A	Method Blank	97	96										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16861-A-1-B MS	Matrix Spike	89	83										
880-16861-A-1-C MSD	Matrix Spike Duplicate	81	73										
890-2535-1	SS04	85	88										
LCS 880-29652/2-A	Lab Control Sample	120	102										
LCSD 880-29652/3-A	Lab Control Sample Dup	124	108										
MB 880-29652/1-A	Method Blank	86	95										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29759/5-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29759

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*

Lab Sample ID: LCS 880-29759/1-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07297		mg/Kg		73	70 - 130		
Toluene			0.100	0.08701		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08425		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1807		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09822		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-29759/2-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08688		mg/Kg		87	70 - 130	17	35
Toluene			0.100	0.08609		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.08616		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1801		mg/Kg		90	70 - 130	0	35
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-16752-A-2-C MS
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.100	0.08763		mg/Kg		87	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

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

Lab Sample ID: 880-16752-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08749		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1846		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.100	0.1009		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-16752-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.1046		mg/Kg		105	70 - 130	14	35
Toluene	<0.00199	U	0.0998	0.1012		mg/Kg		101	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0998	0.09569		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1992		mg/Kg		100	70 - 130	8	35
o-Xylene	<0.00199	U	0.0998	0.1064		mg/Kg		107	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-29770/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29770**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*

Lab Sample ID: LCS 880-29652/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-29652/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1142		mg/Kg		114	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 880-16861-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	53.9		996	1119		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)	833	*- F1	996	1277	F1	mg/Kg		45	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

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

Lab Sample ID: 880-16861-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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	53.9		998	1024		mg/Kg		97	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	833	*- F1	998	1145	F1	mg/Kg		31	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29659/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 09:49	1

Lab Sample ID: LCS 880-29659/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-29659/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-2530-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		248	305.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-2530-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		248	308.1		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

GC VOA

Prep Batch: 29759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	5035	
MB 880-29759/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 29770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29770/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 29845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	8021B	29759
MB 880-29759/5-A	Method Blank	Total/NA	Solid	8021B	29759
MB 880-29770/5-A	Method Blank	Total/NA	Solid	8021B	29770
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	8021B	29759
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29759
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	29759
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29759

Analysis Batch: 29957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 29652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 29696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	8015B NM	29652
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015B NM	29652
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29652
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29652
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	29652
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	29652

Analysis Batch: 29841

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

HPLC/IC

Leach Batch: 29659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Soluble	Solid	DI Leach	
MB 880-29659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 29860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2535-1	SS04	Soluble	Solid	300.0	29659
MB 880-29659/1-A	Method Blank	Soluble	Solid	300.0	29659
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	300.0	29659
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29659
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	29659
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	29659

Lab Chronicle

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Client Sample ID: SS04
Date Collected: 07/11/22 10:30
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2535-1
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			4.99 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 09:39	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29957	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29841	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 17:33	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 11:02	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2535-1
SDG: 03E1558067

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2535-1	SS04	Solid	07/11/22 10:30	07/11/22 15:18	0.5'

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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, LLC	Company Name:	XTO Energy, Inc.
Address:	3122 National parks Hwy	Address:	3104 E. Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	bbelill@ensolum.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 442 443 Battery	Turn Around	☑ Routine ☐ Rush
Project Number:	03E1558067	Due Date:	
Project Location:	EDDY COUNTY, NM	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Conner Shore		
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	Tam 027
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	5.2
Total Containers:		Corrected Temperature:	5.0

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: 300.0)	TPH (8015)	BTEX (8021)
SS04	S	7/11/2022	1030	0.5'	Grab/	1		X	X	X

Parameters

890-2535 Chain of Custody

Sample Comments

Cost Center:1081181001

INCIDENT NUMBER:
NAPP2214734717

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7/11/22 1518	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone 575-988-3199 Fax. 575-988-3199

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-839 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2535-1
Address: 1211 W Florida Ave	Due Date Requested: 7/15/2022			
City: Midland	TAT Requested (days):			
State Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PLU 442 443 Battery	Project #: 89000093			
Site:	SSOW#:			

Analysis Requested

Preservation Codes.

A - HCL, B NaOH, C Zn Acetate, D Nitric Acid, E NaHSO4, F MeOH, G Amchlor, H Ascorbic Acid, I Ice, J DI Water, K EDTA, L EDA, M Hexane, N None, O - AsNaO2, P - Na2O4S, Q Na2SO3, R - Na2S2O3, S H2SO4, T TSP Dodecahydrate, U Acetone, V MCAA, W pH 4-5, Y Trizma, Z other (specify)

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS04 (890-2535-1)	7/11/22	10 30 Mountain		Solid			X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central, LLC

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank 2	Special Instructions/QC Requirements

Empty Kit Relinquished by	Date	Time	Method of Shipment

	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
1	Amanda Stuff			Kramer	7/13/22 1100	
2	Relinquished by	Date/Time	Company	Received by	Date/Time	Company
3	Relinquished by	Date/Time	Company	Received by	Date/Time	Company

Custody Seals Intact. Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2535-1
SDG Number: 03E1558067

Login Number: 2535
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2535-1
SDG Number: 03E1558067

Login Number: 2535
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 07/13/22 12:03 PM

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.	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	

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2536-1
Laboratory Sample Delivery Group: 03E1558067
Client Project/Site: PLU 442 443 Battery

For:
Ensolum
705 W. Wadley
Suite 210
Midland, Texas 79701

Attn: Ben Belill

JKramer

Authorized for release by:
7/18/2022 3:00:35 PM

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

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

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

Client: Ensolum
Project/Site: PLU 442 443 Battery

Laboratory Job ID: 890-2536-1
SDG: 03E1558067

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
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 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Job ID: 890-2536-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-2536-1

Receipt
The samples were received on 7/11/2022 3:18 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 5.0°C

GC VOA
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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-29652 and analytical batch 880-29696 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

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 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Client Sample ID: BH01

Date Collected: 07/11/22 09:00
Date Received: 07/11/22 15:18
Sample Depth: 0.5'

Lab Sample ID: 890-2536-1
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202		mg/Kg		07/14/22 13:24	07/16/22 10:00	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/14/22 13:24	07/16/22 10:00	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/14/22 13:24	07/16/22 10:00	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/14/22 13:24	07/16/22 10:00	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/14/22 13:24	07/16/22 10:00	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/14/22 13:24	07/16/22 10:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*122*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:00*	*1*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:00*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404		mg/Kg			07/18/22 13:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**80.4**		50.0		mg/Kg			07/15/22 10:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:54	1
Diesel Range Organics (Over C10-C28)	**80.4**	*-	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:54	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 17:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*83*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:54*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:07*	*07/14/22 17:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.3**		4.97		mg/Kg			07/16/22 11:12	1

Client Sample ID: BH01A

Date Collected: 07/11/22 09:05
Date Received: 07/11/22 15:18
Sample Depth: 1'

Lab Sample ID: 890-2536-2
Matrix: Solid

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/14/22 13:24	07/16/22 10:20	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/14/22 13:24	07/16/22 10:20	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/14/22 13:24	07/16/22 10:20	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/14/22 13:24	07/16/22 10:20	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/14/22 13:24	07/16/22 10:20	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/14/22 13:24	07/16/22 10:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:20*	*1*

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Client Sample ID: BH01A

Lab Sample ID: 890-2536-2
Matrix: Solid
Date Collected: 07/11/22 09:05
Date Received: 07/11/22 15:18
Sample Depth: 1'

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*100*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:20*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402		mg/Kg			07/18/22 13:45	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	**83.2**		50.0		mg/Kg			07/15/22 10:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 18:14	1
Diesel Range Organics (Over C10-C28)	**83.2**	***-**	50.0		mg/Kg		07/13/22 11:07	07/14/22 18:14	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:07	07/14/22 18:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:07*	*07/14/22 18:14*	*1*
o-Terphenyl	*96*		*70 - 130*	*07/13/22 11:07*	*07/14/22 18:14*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**20.1**		5.00		mg/Kg			07/16/22 11:39	1

Client Sample ID: BH01B

Lab Sample ID: 890-2536-3
Matrix: Solid
Date Collected: 07/11/22 09:10
Date Received: 07/11/22 15:18
Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 10:41	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 10:41	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 10:41	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/14/22 13:24	07/16/22 10:41	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 10:41	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/14/22 13:24	07/16/22 10:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:41*	*1*
1,4-Difluorobenzene (Surr)	*98*		*70 - 130*	*07/14/22 13:24*	*07/16/22 10:41*	*1*

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401		mg/Kg			07/18/22 13:45	1

Method: 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			07/15/22 10:26	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Client Sample ID: BH01B

Date Collected: 07/11/22 09:10
Date Received: 07/11/22 15:18
Sample Depth: 2'

Lab Sample ID: 890-2536-3

Matrix: Solid

Method: 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		07/13/22 11:07	07/14/22 18:35	1
Diesel Range Organics (Over C10-C28)	<49.9	U *-	49.9		mg/Kg		07/13/22 11:07	07/14/22 18:35	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/13/22 11:07	07/14/22 18:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*85*		*70 - 130*	*07/13/22 11:07*	*07/14/22 18:35*	*1*
o-Terphenyl	*93*		*70 - 130*	*07/13/22 11:07*	*07/14/22 18:35*	*1*

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**37.4**		4.98		mg/Kg			07/16/22 11:48	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)											
		BFB1	DFBZ1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16752-A-2-C MS	Matrix Spike	107	99										
880-16752-A-2-D MSD	Matrix Spike Duplicate	105	101										
890-2536-1	BH01	122	99										
890-2536-2	BH01A	107	100										
890-2536-3	BH01B	112	98										
LCS 880-29759/1-A	Lab Control Sample	110	90										
LCSD 880-29759/2-A	Lab Control Sample Dup	105	93										
MB 880-29759/5-A	Method Blank	96	97										
MB 880-29770/5-A	Method Blank	97	96										

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)											
		1CO1	OTPH1										
Lab Sample ID	Client Sample ID	(70-130)	(70-130)										
880-16861-A-1-B MS	Matrix Spike	89	83										
880-16861-A-1-C MSD	Matrix Spike Duplicate	81	73										
890-2536-1	BH01	83	95										
890-2536-2	BH01A	86	96										
890-2536-3	BH01B	85	93										
LCS 880-29652/2-A	Lab Control Sample	120	102										
LCSD 880-29652/3-A	Lab Control Sample Dup	124	108										
MB 880-29652/1-A	Method Blank	86	95										

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-29759/5-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 29759

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/14/22 13:24	07/16/22 02:14	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/14/22 13:24	07/16/22 02:14	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 13:24*	*07/16/22 02:14*	*1*

Lab Sample ID: LCS 880-29759/1-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.07297		mg/Kg		73	70 - 130		
Toluene			0.100	0.08701		mg/Kg		87	70 - 130		
Ethylbenzene			0.100	0.08425		mg/Kg		84	70 - 130		
m-Xylene & p-Xylene			0.200	0.1807		mg/Kg		90	70 - 130		
o-Xylene			0.100	0.09822		mg/Kg		98	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*70 - 130*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*

Lab Sample ID: LCSD 880-29759/2-A
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 29759

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08688		mg/Kg		87	70 - 130	17	35
Toluene			0.100	0.08609		mg/Kg		86	70 - 130	1	35
Ethylbenzene			0.100	0.08616		mg/Kg		86	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.1801		mg/Kg		90	70 - 130	0	35
o-Xylene			0.100	0.09676		mg/Kg		97	70 - 130	1	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*

Lab Sample ID: 880-16752-A-2-C MS
Matrix: Solid
Analysis Batch: 29845

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 29759

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00199	U	0.100	0.09058		mg/Kg		90	70 - 130		
Toluene	<0.00199	U	0.100	0.08763		mg/Kg		87	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

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

Lab Sample ID: 880-16752-A-2-C MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00199	U	0.100	0.08749		mg/Kg		87	70 - 130
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1846		mg/Kg		92	70 - 130
o-Xylene	<0.00199	U	0.100	0.1009		mg/Kg		101	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*99*		*70 - 130*

Lab Sample ID: 880-16752-A-2-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29759**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00199	U	0.0998	0.1046		mg/Kg		105	70 - 130	14	35
Toluene	<0.00199	U	0.0998	0.1012		mg/Kg		101	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0998	0.09569		mg/Kg		96	70 - 130	9	35
m-Xylene & p-Xylene	<0.00398	U	0.200	0.1992		mg/Kg		100	70 - 130	8	35
o-Xylene	<0.00199	U	0.0998	0.1064		mg/Kg		107	70 - 130	5	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*101*		*70 - 130*

Lab Sample ID: MB 880-29770/5-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29845 — **Prep Batch: 29770**

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/14/22 16:20	07/15/22 14:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		07/14/22 16:20	07/15/22 14:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*
1,4-Difluorobenzene (Surr)	*96*		*70 - 130*	*07/14/22 16:20*	*07/15/22 14:37*	*1*

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

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

Lab Sample ID: MB 880-29652/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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		07/13/22 11:06	07/14/22 11:11	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/13/22 11:06	07/14/22 11:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*86*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/13/22 11:06*	*07/14/22 11:11*	*1*

Lab Sample ID: LCS 880-29652/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	1102		mg/Kg		110	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane	*120*		*70 - 130*
o-Terphenyl	*102*		*70 - 130*

Lab Sample ID: LCSD 880-29652/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	1173		mg/Kg		117	70 - 130	0	20
Diesel Range Organics (Over C10-C28)			1000	1142		mg/Kg		114	70 - 130	4	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane	*124*		*70 - 130*
o-Terphenyl	*108*		*70 - 130*

Lab Sample ID: 880-16861-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	53.9		996	1119		mg/Kg		107	70 - 130		
Diesel Range Organics (Over C10-C28)	833	*- F1	996	1277	F1	mg/Kg		45	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*89*		*70 - 130*
o-Terphenyl	*83*		*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

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

Lab Sample ID: 880-16861-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 29696 — **Prep Batch: 29652**

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	53.9		998	1024		mg/Kg		97	70 - 130	9	20
Diesel Range Organics (Over C10-C28)	833	*- F1	998	1145	F1	mg/Kg		31	70 - 130	11	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*81*		*70 - 130*
o-Terphenyl	*73*		*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-29659/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/16/22 09:49	1

Lab Sample ID: LCS 880-29659/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	263.5		mg/Kg		105	90 - 110		

Lab Sample ID: LCSD 880-29659/3-A — **Client Sample ID: Lab Control Sample Dup**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	263.3		mg/Kg		105	90 - 110	0	20

Lab Sample ID: 890-2530-A-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	36.5		248	305.7		mg/Kg		109	90 - 110		

Lab Sample ID: 890-2530-A-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Solid — **Prep Type: Soluble**
Analysis Batch: 29860

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	36.5		248	308.1		mg/Kg		110	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

GC VOA

Prep Batch: 29759

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	5035	
890-2536-2	BH01A	Total/NA	Solid	5035	
890-2536-3	BH01B	Total/NA	Solid	5035	
MB 880-29759/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	5035	
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 29770

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-29770/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 29845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	8021B	29759
890-2536-2	BH01A	Total/NA	Solid	8021B	29759
890-2536-3	BH01B	Total/NA	Solid	8021B	29759
MB 880-29759/5-A	Method Blank	Total/NA	Solid	8021B	29759
MB 880-29770/5-A	Method Blank	Total/NA	Solid	8021B	29770
LCS 880-29759/1-A	Lab Control Sample	Total/NA	Solid	8021B	29759
LCSD 880-29759/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	29759
880-16752-A-2-C MS	Matrix Spike	Total/NA	Solid	8021B	29759
880-16752-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	29759

Analysis Batch: 29958

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	Total BTEX	
890-2536-2	BH01A	Total/NA	Solid	Total BTEX	
890-2536-3	BH01B	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 29652

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	8015NM Prep	
890-2536-2	BH01A	Total/NA	Solid	8015NM Prep	
890-2536-3	BH01B	Total/NA	Solid	8015NM Prep	
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 29696

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	8015B NM	29652
890-2536-2	BH01A	Total/NA	Solid	8015B NM	29652
890-2536-3	BH01B	Total/NA	Solid	8015B NM	29652
MB 880-29652/1-A	Method Blank	Total/NA	Solid	8015B NM	29652
LCS 880-29652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	29652

QC Association Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

GC Semi VOA (Continued)

Analysis Batch: 29696 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-29652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	29652
880-16861-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	29652
880-16861-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	29652

Analysis Batch: 29842

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Total/NA	Solid	8015 NM	
890-2536-2	BH01A	Total/NA	Solid	8015 NM	
890-2536-3	BH01B	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 29659

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Soluble	Solid	DI Leach	
890-2536-2	BH01A	Soluble	Solid	DI Leach	
890-2536-3	BH01B	Soluble	Solid	DI Leach	
MB 880-29659/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 29860

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2536-1	BH01	Soluble	Solid	300.0	29659
890-2536-2	BH01A	Soluble	Solid	300.0	29659
890-2536-3	BH01B	Soluble	Solid	300.0	29659
MB 880-29659/1-A	Method Blank	Soluble	Solid	300.0	29659
LCS 880-29659/2-A	Lab Control Sample	Soluble	Solid	300.0	29659
LCSD 880-29659/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	29659
890-2530-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	29659
890-2530-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	29659

Lab Chronicle

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Client Sample ID: BH01

Date Collected: 07/11/22 09:00
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2536-1

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			4.95 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 10:00	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29958	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29842	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 17:54	AJ	XEN MID
Soluble	Leach	DI Leach			5.03 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 11:12	CH	XEN MID

Client Sample ID: BH01A

Date Collected: 07/11/22 09:05
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2536-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 10:20	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29958	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29842	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 18:14	AJ	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 11:39	CH	XEN MID

Client Sample ID: BH01B

Date Collected: 07/11/22 09:10
Date Received: 07/11/22 15:18

Lab Sample ID: 890-2536-3

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			4.99 g	5 mL	29759	07/14/22 13:24	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	29845	07/16/22 10:41	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			29958	07/18/22 13:45	SM	XEN MID
Total/NA	Analysis	8015 NM		1			29842	07/15/22 10:26	AJ	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	29652	07/13/22 11:07	DM	XEN MID
Total/NA	Analysis	8015B NM		1			29696	07/14/22 18:35	AJ	XEN MID
Soluble	Leach	DI Leach			5.02 g	50 mL	29659	07/13/22 12:36	SMC	XEN MID
Soluble	Analysis	300.0		1			29860	07/16/22 11:48	CH	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23

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

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

Method Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

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

Protocol References:

ASTM = ASTM International

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU 442 443 Battery

Job ID: 890-2536-1
SDG: 03E1558067

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2536-1	BH01	Solid	07/11/22 09:00	07/11/22 15:18	0.5'
890-2536-2	BH01A	Solid	07/11/22 09:05	07/11/22 15:18	1'
890-2536-3	BH01B	Solid	07/11/22 09:10	07/11/22 15:18	2'

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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, LLC	Company Name:	XTO Energy, Inc.
Address:	3122 National parks Hwy	Address:	3104 E. Green Street
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	9898540852	Email:	bbelill@ensolum.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 442 443 Battery	Turn Around	
Project Number:	03E1558067	☑ Routine ☐ Rush	
Project Location:	EDDY COUNTY, NM	Due Date:	
Sampler's Name:	Conner Shore	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT				
Temp Blank:	(Yes) No	Wet Ice:	(Yes) No	
Samples Received Intact:	(Yes) No	Thermometer ID:	TRM-007	
Cooler Custody Seals:	Yes No (N/A)	Correction Factor:	-0.2	
Sample Custody Seals:	Yes No (N/A)	Temperature Reading:	5.2	
Total Containers:		Corrected Temperature:	5.0	

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	CHLORIDES (EPA: 300.0)	TPH (8015)	BTEX (8021)
BH01	S	7/11/2022	900	0.5'	Grab/	1	X	X	X
BH01A	S	7/11/2022	905	1'	Grab/	1	X	X	X
BH01B	S	7/11/2022	910	2'	Grab/	1	X	X	X

Sample Comments

Cost Center:1081181001

INCIDENT NUMBER: NAPP2214734717

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1	Amanda Stuyk	7/11/22 1518			
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220
Phone. 575-988-3199 Fax 575-988-3199

Chain of Custody Record

eurofins | Environment Testing America

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer Jessica	Carrier Tracking No(s)	COC No: 890-837 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-2536-1
Address: 1211 W Florida Ave	Due Date Requested: 7/15/2022			
City: Midland	TAT Requested (days)			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU 442 443 Battery	Project #: 89000093			
Site	SSOW#:			

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note
			Preservation Code:										
BH01 (890-2536-1)	7/11/22	09 00 Mountain		Solid			X	X	X	X	X	1	
BH01A (890-2536-2)	7/11/22	09 05 Mountain		Solid			X	X	X	X	X	1	
BH01B (890-2536-3)	7/11/22	09 10 Mountain		Solid			X	X	X	X	X	1	

Preservation Codes

A	HCL	M	Hexane
B	NaOH	N	None
C	Zn Acetate	O	AsNaO2
D	Nitric Acid	P	Na2O4S
E	NaHSO4	Q	Na2SO3
F	MeOH	R	Na2S2O3
G	Amchlor	S	H2SO4
H	Ascorbic Acid	T	TSP Dodecahydrate
I	Ice	U	Acetone
J	DI Water	V	MCAA
K	EDTA	W	pH 4-5
L	EDA	Y	Trizma
		Z	other (specify)

Other:

Note Since laboratory accreditations are subject to change Eurofins Environment Testing South Central LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories This sample shipment is forwarded under chain-of-custody If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
Unconfirmed	☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
Deliverable Requested I II III IV Other (specify) Primary Deliverable Rank. 2	Special Instructions/QC Requirements

Empty Kit Relinquished by:	Date	Time.	Method of Shipment:

	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time	Company
	Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No	Cooler Temperature(s) °C and Other Remarks.

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2536-1
SDG Number: 03E1558067

Login Number: 2536
List Number: 1
Creator: Stutzman, Amanda

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.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2536-1
SDG Number: 03E1558067

Login Number: 2536
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 07/13/22 11:52 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.	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	

ENSOLUM

APPENDIX E

NMOCD Notifications

Green, Garrett J

From: Green, Garrett J
Sent: Tuesday, May 17, 2022 9:27 AM
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD
Cc: DelawareSpills /SM
Subject: XTO - 24 Hour Notification - PLU 442/443 Battery - Released on 5/15/22

All,

This is notification of a release greater than 25 barrels that occurred Sunday at the PLU 442/443 Battery near the GPS coordinates given below. All of the fluids remained in containment and all standing fluids were recovered by vacuum truck. Details will be provided with a form C-141. Please contact us with any questions or concerns.

GPS: 32.19297,-103.91887

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

Collins, Melanie

From: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Sent: Tuesday, May 17, 2022 4:01 PM
To: Green, Garrett J
Cc: DelawareSpills /SM; Bratcher, Mike, EMNRD; Nobui, Jennifer, EMNRD; Harimon, Jocelyn, EMNRD
Subject: RE: [EXTERNAL] XTO - 24 Hour Notification - PLU 442/443 Battery - Released on 5/15/22

Garrett,

Thank you for the notification. Please include a copy of this and all notifications in the remedial and/or closure reports to ensure the notifications are documented in the project file.

Robert Hamlet • Environmental Specialist - Advanced
Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Tuesday, May 17, 2022 9:27 AM
To: Enviro, OCD, EMNRD <OCD.Enviro@state.nm.us>; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>
Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>
Subject: [EXTERNAL] XTO - 24 Hour Notification - PLU 442/443 Battery - Released on 5/15/22

All,

This is notification of a release greater than 25 barrels that occurred Sunday at the PLU 442/443 Battery near the GPS coordinates given below. All of the fluids remained in containment and all standing fluids were recovered by vacuum truck. Details will be provided with a form C-141. Please contact us with any questions or concerns.

GPS: 32.19297,-103.91887

Thank you,

Garrett Green

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

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

From: Green, Garrett J
To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD; Hamlet, Robert, EMNRD
Cc: Pennington, Shelby G; Tacoma Morrissey; DelawareSpills /SM
Subject: XTO - Sampling Notification (week of 7/11/22 - 7/15/22)
Date: Friday, July 8, 2022 1:21:32 PM

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of July 11, 2022.

Monday, July 11
- PLU 442, 443 / nAPP2214734717

Wednesday, July 13
- PLU 15 TWR Battery / nAPP2205641685, nAPP2205638843, nAPP2207746719

Thursday, July 14
- PLU 15 TWR Battery / nAPP2205641685, nAPP2205638843, nAPP2207746719

Friday, July 15
- PLU 15 TWR Battery / nAPP2205641685, nAPP2205638843, nAPP2207746719

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 133508

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 133508
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jnobui	Closure Report Approved.	9/29/2022