



March 25, 2026

New Mexico Oil Conservation Division

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

**Re: Reclamation Report
Poker Lake Unit 301H
Incident Number nAPP2322646789
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc (XTO), has prepared the following *Reclamation Report* for the Poker Lake Unit 301H (Site). This *Reclamation Report* documents the Site history, reclamation activities completed to date, and proposes a vegetation monitoring plan.

BACKGROUND

The Site is located in Unit M, Section 27, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.18436°, -103.87523°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management (BLM).

On July 31, 2023, corrosion of a surface flow line resulted in the release of 0.96 barrels (bbls) of crude oil and 5.41 bbls of produced water onto the surrounding pasture. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 0.23 bbls of crude oil and 1.27 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 14, 2023. The release was assigned Incident Number nAPP2322646789.

Delineation and excavation of impacted soil was completed at the Site between August 30, and September 27, 2023. The final excavation measured approximately 1,380 square feet. A total of approximately 160 cubic yards of impacted soil were removed during the excavation activities. Based on the delineation and excavation soil sample analytical results, a *Closure Request* dated October 25, 2023, was submitted to the NMOCD on October 26, 2023. The NMOCD approved the *Closure Request* on March 1, 2024. Additional details regarding the release, Site Characterization, delineation and excavation activities, and soil sample analytical results can be referenced in the approved *Closure Request* attached as an appendix in this report. Remediation of the release was completed in accordance with Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC).

XTO Energy, Inc
Reclamation Report
Poker Lake Unit 301H

RECLAMATION ACTIVITIES

Upon completion of excavation activities and receipt of final laboratory analytical results, the excavation was backfilled and the disturbed area was restored to its original condition. The excavation area in the pasture was backfilled with locally procured topsoil. Following backfill activities, the disturbed area was graded and contoured to match the surrounding topography. The release extent, excavation extent, and reclamation area are shown on the attached Figure 1.

One representative 5-point composite sample (BF01) was collected from the topsoil backfill material on June 20, 2025. The backfill soil sample was transported under strict chain-of-custody procedures to Cardinal Laboratories in Hobbs, New Mexico, for analysis of the following constituents of concern (COCs): benzene, toluene, ethylbenzene, and total xylenes (BTEX) following United States Environmental Protection Agency (EPA) Method 8021B; total petroleum hydrocarbons (TPH)–gasoline range organics (GRO), TPH–diesel range organics (DRO), and TPH–oil range organics (ORO) following EPA Method 8015M/D; and chloride following Standards Method 4500.

Laboratory analytical results for the backfill soil sample confirmed compliance with NMOCD requirements for the reclaimed area to contain non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 milligrams per kilogram (mg/kg), BTEX concentrations less than 50 mg/kg, and TPH concentrations less than 100 mg/kg. The laboratory analytical results are summarized in the attached Table 1 and the complete laboratory analytical report is included as Appendix A. Photographic documentation of the current Site condition is included in Appendix B.

The pasture area will be seeded during the Spring of 2026, when temperatures and precipitation are conducive to vegetation growth. The Site will be seeded with the below BLM seed mix #1 for loamy sites at the rate specified in pounds of pure live seed (PLS) per acre.

Species/Cultivar	PLS/Acre
Plains lovegrass (<i>Eragrostis intermedia</i>)	0.5
Sand dropseed (<i>Sporobolus cryptandrus</i>)	1.0
Sideoats grama (<i>Bouteloua curtipensula</i>)	5.0
Plains bristlegrass (<i>Setaria macrostachya</i>)	2.0

The seed mix will be applied via drill seeding or broadcast seeding. If broadcast seeding is selected, the PLS/acre will be doubled, and the seed will be covered by chaining or harrowing the Site.

VEGETATION MONITORING

The Site will be monitored for vegetation growth to ensure that reclamation activities were successful. Focus for this phase will be to prevent erosion and Site degradation, and to monitor for and treat invasive and noxious weed species.

- Annual inspections will take place at the location to assess revegetation progress until vegetation is consistent with local natural vegetation density.
- If necessary, an additional application of the BLM seed mix will be applied.
- Noxious and invasive weeds will be identified and treated by licensed contracted herbicide applicator or mechanically removed.

A *Revegetation Report* will be submitted to the NMOCD once vegetation growth in the reclaimed pasture area has uniform vegetative cover that reflects a life-form ratio of plus or minus 50 percent (%) of pre-

XTO Energy, Inc
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Poker Lake Unit 301H

disturbance levels and a total percent plant cover of at least 70% of pre-disturbance levels, excluding noxious weeds, per NMAC 19.15.29.13 D.(3).

RECLAMATION APPROVAL REQUEST

The approved October 25, 2023, *Closure Request* is included in Appendix C. Based on the reclamation activities completed to date and proposed vegetation monitoring plan described above, XTO respectfully requests approval of this *Reclamation Report* and a status update to *Reclamation Report Approved, Pending submission of Re-Vegetation Report* for Incident nAPP2322646789.

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

Sincerely,
Ensolum, LLC



Kim Thomason
Senior Technician



Aimee Cole
Senior Managing Scientist

cc: Robert Woodall, XTO
Richard Kotzur, XTO
Bureau of Land Management




Appendices:

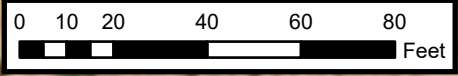
- Figure 1 Reclamation Area Map
- Table 1 Backfill Soil Sample Analytical Results
- Appendix A Laboratory Analytical Report & Chain of Custody Documentation
- Appendix B Photographic Log
- Appendix C October 25, 2023, *Closure Request*



FIGURES

Legend

-  Surface Line
-  Release Extent
-  Excavation Extent/
Reclamation Area



Sources: Environmental Systems Research Institute (ESRI)



Reclamation Area Map

XTO Energy, Inc.
 Poker Lake Unit 301H
 Incident Number: nAPP2322646789
 Unit M, Section 27, T 24S, R 30E
 Eddy County, New Mexico

FIGURE
1



TABLES



TABLE 1 BACKFILL SOIL SAMPLE ANALYTICAL RESULTS Poker Lake Unit 301H XTO Energy, Inc. Eddy County, New Mexico										
Sample Designation	Date	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 Reclamation Requirements (NMAC 19.15.29)			10	50	NE	NE	NE	NE	100	600
Backfill Soil Sample										
BF01	6/20/2025	Surface	<0.050	<0.300	<10.0	<10.0	<10.0	<10.0	<10.0	48.0

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon



APPENDIX A

Laboratory Analytical Report & Chain of Custody Documentation



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

June 27, 2025

TRACY HILLARD

ENSOLUM, LLC

705 W WADLEY AVE.

MIDLAND, TX 79705

RE: PLU 301H - SPILLS

Enclosed are the results of analyses for samples received by the laboratory on 06/23/25 12:18.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (*). For a complete list of accredited analytes and matrices visit the TCEQ website at www.tceq.texas.gov/field/qa/lab_accred_certif.html.

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

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

Accreditation applies to public drinking water matrices.

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

Sincerely,

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

Celey D. Keene

Lab Director/Quality Manager



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

Analytical Results For:

ENSOLUM, LLC
 TRACY HILLARD
 705 W WADLEY AVE.
 MIDLAND TX, 79705
 Fax To:

Received:	06/23/2025	Sampling Date:	06/20/2025
Reported:	06/27/2025	Sampling Type:	Soil
Project Name:	PLU 301H - SPILLS	Sampling Condition:	Cool & Intact
Project Number:	03C15585642	Sample Received By:	Alyssa Parras
Project Location:	XTO 32.18436-103.87523		

Sample ID: BF 01 0' (H253750-01)

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	06/25/2025	ND	2.02	101	2.00	0.403	
Toluene*	<0.050	0.050	06/25/2025	ND	2.06	103	2.00	0.355	
Ethylbenzene*	<0.050	0.050	06/25/2025	ND	2.10	105	2.00	0.309	
Total Xylenes*	<0.150	0.150	06/25/2025	ND	6.16	103	6.00	0.340	
Total BTEX	<0.300	0.300	06/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 71.5-134

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	06/25/2025	ND	400	100	400	7.69	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	06/24/2025	ND	224	112	200	3.59	
DRO >C10-C28*	<10.0	10.0	06/24/2025	ND	214	107	200	5.83	
EXT DRO >C28-C36	<10.0	10.0	06/24/2025	ND					

Surrogate: 1-Chlorooctane 82.4 % 44.4-145

Surrogate: 1-Chlorooctadecane 72.8 % 40.6-153

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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

Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- ** Samples not received at proper temperature of 6°C or below.
- *** Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

Cardinal Laboratories

*=Accredited Analyte

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



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

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1-1

BILL TO

ANALYSIS REQUEST

Company Name: Ensolum, LLC
 Project Manager: Tracy Hillard
 Address: 601 N Marlenfeld Street, Suite 400
 City: Midland State: TX Zip: 79701
 Phone #: (575) 937-3406 Fax #: 575-393-2476
 Project #: 03C1558648 Project Owner: XTO Energy
 Project Name: PLU 301 H - SPILLS
 Project Location: 32.18436, -103.87523
 Sampler Name: Trevor Hays
 P.O. #: Company: XTO Energy, Inc
 Attn: Colton Brown
 Address: 3104 E Greene St
 City: Carlsbad State: NM Zip: 88220
 Phone #: Fax #:

Lab I.D.	Sample I.D.	Depth (feet)	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX							DATE	TIME	TPH 8015	BTEX 8021	Chloride 4500
					GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER :	ACID/BASE:					
HAS3750	BC01	0'	C I	1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	06/20/15	10:20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

PLEASE NOTE: Liability and Damages. Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims including those for negligence and any other cause whatsoever shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

Relinquished By: Trevor Hays Date: 1/23/15 Received By: Colton Brown
 Relinquished By: _____ Date: _____ Received By: _____
 Delivered By: (Circle One) O C B Other: _____
 Sample Condition: Cool Intact
 Corrected Temp. °C: 25.5 Yes No
 CHECKED BY: (Initials) AB
 Turnaround Time: APR 23 2015 Standard
 Thermometer ID: A13 Rush
 Cost Center: 4138681001 Bacteria (only) Sample Condition: Cool Intact Yes No
 Corrected Temp. °C: _____

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



APPENDIX B

Photographic Log



Photographic Log
XTO Energy, Inc
Poker Lake Unit 301H
nAPP2322646789

210°S (T) • 32.184591, -103.875331 ±7m ▲ 1009m



Sample area

PLU 301 H
20 Jun 2025, 10:16:44 AM

106°E (T) • 32.184591, -103.875331 ±5m ▲ 1009m



Sample area

PLU 301 H
20 Jun 2025, 10:16:49 AM

Photograph: 1 Date: 6/20/2025
Description: Backfilled Excavation Area
View: South

Photograph: 2 Date: 6/20/2025
Description: Backfilled Excavation Area
View: East

279°W (T) • 32.184591, -103.875331 ±5m ▲ 1009m



Sample area

PLU 301 H
20 Jun 2025, 10:17:11 AM

95°E (T) • 32.184591, -103.875331 ±7m ▲ 1009m



Sample area

PLU 301 H
20 Jun 2025, 10:19:05 AM

Photograph: 3 Date: 6/20/2025
Description: Backfilled Excavation Area
View: West

Photograph: 4 Date: 6/20/2025
Description: Backfilled Excavation Area
View: East



APPENDIX C

October 25, 2023, *Closure Request*



October 25, 2023

New Mexico Oil Conservation Division

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

**Re: Closure Request
Poker Lake Unit 301H
Incident Number NAPP2322646789
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document assessment, excavation, and soil sampling activities performed at the Poker Lake Unit 301H (Site). The purpose of the assessment, excavation, and soil sampling activities was to address impacts to soil resulting from a release of crude oil and produced water at the Site. Based on the excavation activities and soil sample laboratory analytical results, XTO is submitting this Closure Request, describing remediation that has occurred and requesting closure for Incident Number NAPP2322646789.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit M, Section 27, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.18436°, -103.87523°) and is associated with oil and gas exploration and production operations on federal land managed by the Bureau of Land Management.

On July 31, 2023, corrosion of a surface flow line resulted in the release of 0.96 barrels (bbls) of crude oil and 5.41 bbls of produced water onto the surrounding pasture. A vacuum truck was immediately dispatched to the Site to recover the free-standing fluids; approximately 0.23 bbls of crude oil and 1.27 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 14, 2023. The release was assigned Incident Number NAPP2322646789.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. 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/soil boring with depth to groundwater data is New Mexico Office of the State Engineer (NMOSE) soil boring C-04474, located approximately 0.27 miles southwest of the Site. The soil boring was drilled during September

XTO Energy, Inc.
Closure Request
Poker Lake Unit 301H

2020 to a total depth of 110 feet bgs, and no groundwater was encountered. 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 is greater than 300 feet from 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 I Closure Criteria (Closure Criteria) apply:

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

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

SITE ASSESSMENT ACTIVITIES

On August 30, 2023, Ensolum personnel were at the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Assessment soil samples SS01 through SS03 were collected within the visible release extent at a depth of 0.5 feet bgs to assess surficial soil within the release. Assessment soil samples SS04 through SS07 were collected around the visible release extent at a depth of 0.5 feet bgs to confirm the lateral extent of the release. The soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site visit and a photographic log is included as Appendix B.

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

Laboratory analytical results for assessment soil samples SS01 through SS03, collected within the release extent, indicated TPH and chloride concentrations exceeded the Site Closure Criteria and/or reclamation requirements. Laboratory analytical results for assessment samples SS06 through SS08, collected around the release extent, were compliant with the most stringent Table I Closure Criteria and successfully defined the lateral extent of the release to the north, south, and west. Laboratory analytical results for assessment sample SS05, collected east of the visible release extent, exceeded the reclamation requirement for chloride. Based on the laboratory analytical results, additional assessment

XTO Energy, Inc.
Closure Request
Poker Lake Unit 301H

activities were warranted to delineate the vertical extent of the release. The laboratory analytical results are summarized on the attached Table 1 and the complete laboratory analytical reports are included in Appendix D.

DELINEATION ACTIVITIES

On September 25, 2023, Ensolum personnel returned to the Site to delineate the vertical extent of impacted soil within the release extent. Potholes PH01 through PH03 were advanced via backhoe at the location of assessment samples SS01 through SS03. The potholes were advanced to depths ranging from 2 feet to 6 feet bgs. Soil from the potholes was field screened at 1-foot intervals for VOCs and chloride. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. Discrete delineation soil samples were collected from the potholes at depths ranging from 2 feet to 6 feet bgs. The delineation soil samples were collected, handled, and analyzed following the same procedures described above. The delineation soil sample locations were mapped utilizing a handheld GPS unit and are depicted on Figure 2.

Laboratory analytical results and/or field screening results for the delineation soil samples collected from potholes PH01 through PH03 indicated TPH and/or chloride concentrations exceeded the reclamation requirements at depths ranging from 1-foot to 4 feet bgs. Laboratory analytical results for the final depth delineation sample from each pothole indicate all COC concentrations are compliant with the Site Closure Criteria and reclamation requirements, for samples collected in the top four feet. Laboratory analytical results are summarized in Table 1 and the complete analytical reports are included as Appendix D. Based on visible staining in the release area and laboratory analytical results for the assessment and delineation soil samples, excavation activities were warranted.

EXCAVATION ACTIVITIES

Between September 25, 2023, and September 27, 2023, Ensolum personnel were at the Site to oversee excavation of impacted soil in the areas of assessment samples SS01 through SS03, and SS05 and potholes PH01 through PH03. Excavation activities were completed utilizing a hydrovac, backhoe, and transport vehicles. To direct excavation activities, soil was field screened for VOCs and chloride. The excavation was completed to depths ranging from 1-foot to 4 feet bgs.

Following removal of the impacted soil, 5-point composite soil samples were collected at least every 200 square feet from the floor and sidewalls of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS08 were collected from the floor of the excavation at depths ranging from 1-foot to 4 feet bgs. Composite soil samples SW01 through SW04 were collected from the sidewalls of the excavation at depths ranging from the ground surface to 4 feet bgs. The soil samples were collected, handled, and analyzed following the same procedures described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

Laboratory analytical results for excavation floor samples FS01 through FS08 and excavation sidewall samples SW01 through SW04 indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements for samples collected in the top four feet. The laboratory analytical results are summarized on Table 1 and the complete laboratory analytical reports are included in Appendix D.

The excavation area measured approximately 1,380 square feet. A total of approximately 160 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 disposal facility in Carlsbad, New Mexico.

XTO Energy, Inc.
Closure Request
Poker Lake Unit 301H

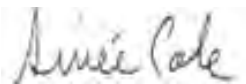
CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the July 31, 2023, release of crude oil and produced water. Laboratory analytical results for excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, where applicable. Additionally, the release was laterally and delineated to below the most stringent Table I Closure Criteria by assessment samples SS04, SS06, and SS07 and sidewall samples SW01 through SW04. Based on the soil sample laboratory analytical results, no further remediation is required. XTO will backfill the excavation with topsoil purchased locally and recontour the Site to match pre-existing site conditions. The disturbed pasture area will be seeded with a BLM-approved seed mixture.

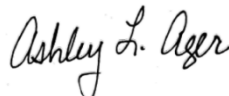
Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater is greater than 100 feet bgs and no sensitive receptors were identified near the release extent. XTO believes the remedial actions completed at the Site are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2322646789. NMOCD notifications are included in Appendix E.

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

Sincerely,
Ensolum, LLC



Aimee Cole
Senior Managing Scientist



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

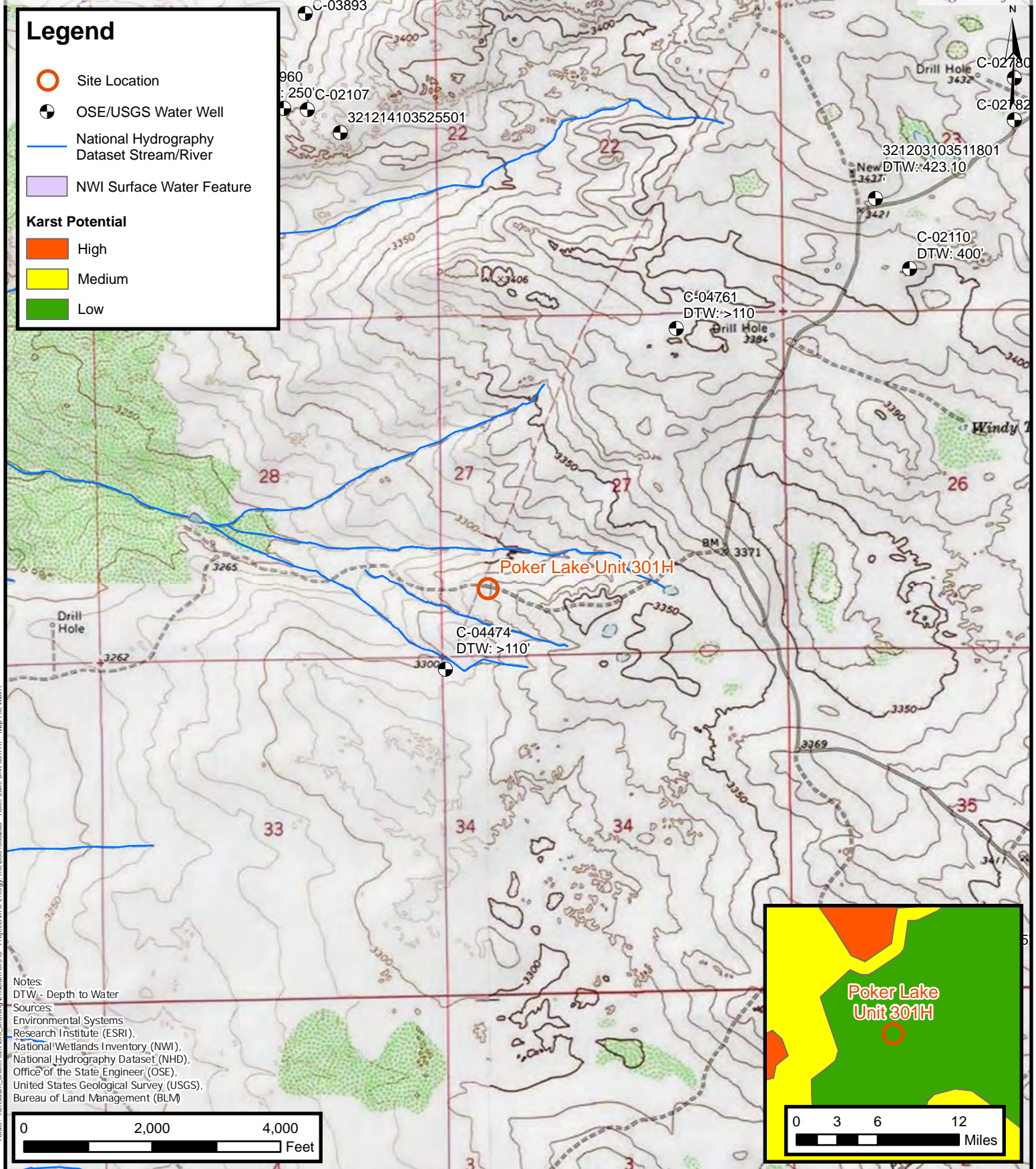
cc: Garrett Green, XTO
Bureau of Land Management

Appendices:

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



FIGURES

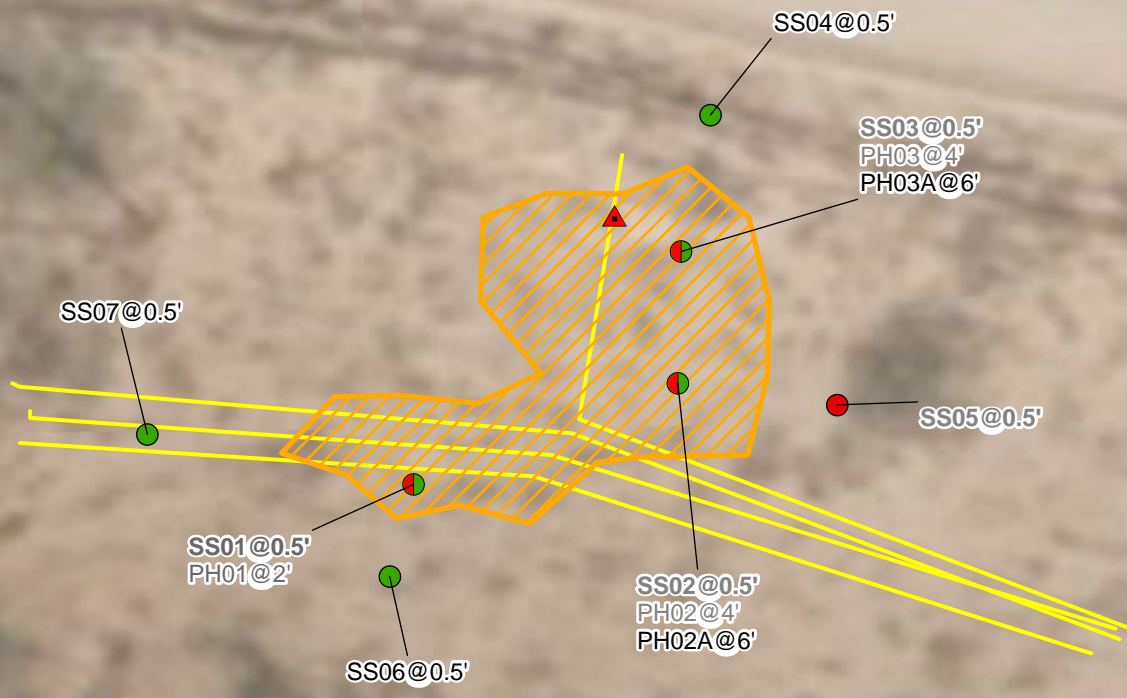


Site Receptor Map
 XTO Energy, Inc
 Poker Lake Unit 301H
 Incident Number: NAPP2322646789
 Unit M, Sec 27, T24S, R30E
 Eddy County, New Mexico, United States

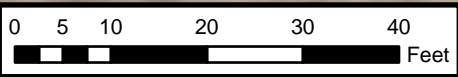
FIGURE
 1

Legend

- Assessment Soil Sample in Compliance with Closure Criteria
- Delineation Soil Sample with Concentrations Initially Exceeding Closure Criteria
- Assessment Soil Sample with Concentrations Exceeding Closure Criteria
- ▲ Point of Release
- Surface Flowlines
- Release Extent



Notes:
 Sample ID @ Depth Below Ground Surface.
 Samples in bold indicate sample exceeded applicable closure criteria.
 Grey text indicate soil sample was removed during excavation activities.



Sources: Environmental Systems Research Institute (ESRI)



Delineation Soil Sample Locations

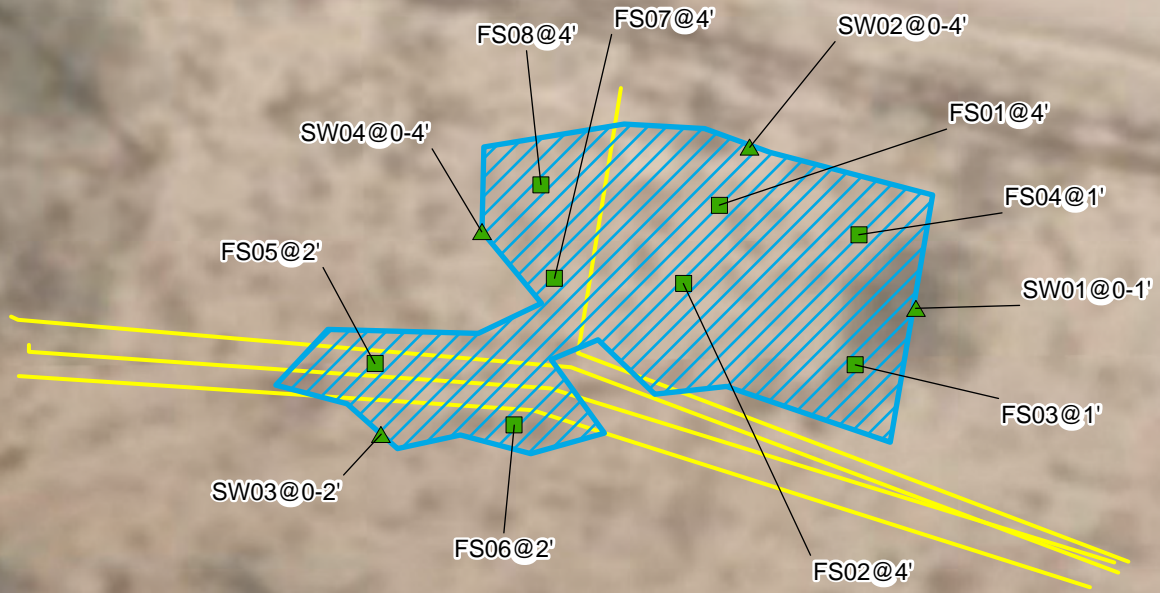
XTO Energy, Inc.
 Poker Lake Unit 301H
 Incident Number: NAPP2322646789
 Unit M, Sec 27, T24S, R30E
 Eddy County, New Mexico, United States

FIGURE

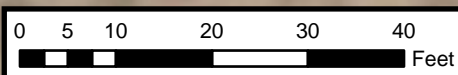
2

Legend

- Excavation Floor Soil Sample in Compliance with Closure Criteria
- ▲ Excavation Sidewall Soil Sample in Compliance with Closure Criteria
- Excavation Extent
- Surface Flowline



Notes:
 Sample ID @ Depth Below Ground Surface.



Sources: Environmental Systems Research Institute (ESRI)



Excavation Soil Sample Locations

XTO Energy, Inc.
 Poker Lake Unit 301H
 Incident Number: NAPP2322646789
 Unit M, Sec 27, T24S, R30E
 Eddy County, New Mexico, United States

FIGURE
3



TABLES



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Poker Lake Unit 301H XTO Energy, Inc. Eddy County, New Mexico										
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Assessment and Delineation Soil Samples										
SS01*	08/30/2023	0.5	0.106	1.05	<50.1	3,290	237	3,290	3,530	2,750
PH01*	09/27/2023	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	139
SS02*	08/30/2023	0.5	<0.0202	2.43	128	2,850	222	2,980	3,200	1,030
PH02*	09/25/2023	4	<0.00199	<0.00398	<49.7	<49.7	<49.7	<49.7	<49.7	1,100
PH02A	09/25/2023	6	<0.00200	<0.00401	<50.1	<50.1	<50.1	<50.1	<50.1	277
SS03*	08/30/2023	0.5	<0.0199	<0.0398	<50.5	593	66.5	593	660	7,290
PH03*	09/25/2023	4	<0.00198	0.0482	<50.3	300	<50.3	300	300	5,610
PH03A	09/25/2023	6	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,480
SS04*	08/30/2023	0.5	<0.00198	<0.00396	<49.8	72.1	<49.8	72.1	72.1	515
SS05*	08/30/2023	0.5	<0.00201	<0.00402	<49.6	55.1	<49.6	55.1	55.1	683
SS06*	08/30/2023	0.5	<0.00201	<0.00402	<50.3	<50.3	<50.3	<50.3	<50.3	529
SS07*	08/30/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	255
Excavation Floor Soil Samples										
FS01	09/26/2023	4	<0.00199	<0.00398	<49.6	144	<49.6	144	144	871
FS02	09/26/2023	4	<0.00198	<0.00396	<50.4	169	<50.4	169	169	942
FS03*	09/26/2023	1	<0.00199	<0.00398	<50.1	93	<50.1	93	93	211
FS04*	09/26/2023	1	<0.00200	<0.00399	<49.7	<49.7	<49.7	<49.7	<49.7	171
FS05*	09/27/2023	2	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	117
FS06*	09/27/2023	2	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	69.3
FS07	09/27/2023	4	<0.00202	<0.00404	<50.5	<50.5	<50.5	<50.5	<50.5	1,320
FS08	09/27/2023	4	<0.00199	<0.00398	<50.5	<50.5	<50.5	<50.5	<50.5	122



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Poker Lake Unit 301H XTO Energy, Inc. Eddy County, New Mexico										
Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Excavation Sidewall Soil Samples										
SW01*	09/26/2023	0 - 1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	111
SW02*	09/26/2023	0 - 4	<0.00199	<0.00398	<50.3	<50.3	<50.3	<50.3	<50.3	122
SW03*	09/27/2023	0 - 2	<0.00199	<0.00398	<50.1	<50.1	<50.1	<50.1	<50.1	114
SW04*	09/27/2023	0 - 4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	60.4

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

NMAC: New Mexico Administrative Code

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

TPH: Total Petroleum Hydrocarbon

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

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

* indicates sample was collected in area to be reclaimed after remediation is complete; reclamation requirement in the top 4 feet is 600 mg/kg for chloride and 100 mg/kg for TPH.



APPENDIX A

Referenced Well Records



WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

351 37 007 E 2020 #3104

1. GENERAL AND WELL LOCATION	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4474	
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)	
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX
					ZIP 79707	
WELL LOCATION (FROM GPS)		DEGREES LATITUDE 32°	MINUTES 10'	SECONDS 51.44" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND	
		LONGITUDE -103°	52'	38.65" W	* DATUM REQUIRED: WGS 84	
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE						


2. DRILLING & CASING INFORMATION	LICENSE NO. 1249	NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.			
	DRILLING STARTED 09/10/20	DRILLING ENDED 09/10/20	DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 110	DEPTH WATER FIRST ENCOUNTERED (FT) n/a			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input checked="" type="checkbox"/> DRY HOLE <input type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) n/a			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input checked="" type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	48	±8.5	Boring- HSA	--	--	--	--
	48	110	±4.5	Boring- Air Rotary	--	--	--	--

3. ANNULAR MATERIAL	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
	FROM	TO				

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/17)			
FILE NO.	C-4474	POD NO.	1	TRN NO.	077910
LOCATION	245. 30E. 34.111		WELL TAG ID NO.	PAGE 1 OF 2	

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO				
	0	30	30	Sand, Medium , poorly-graded with silt, no plasticity, Red-Brown	Y ✓ N	
	30	45	15	Clayey Sand, Medium, low plasticity, Dark Red-Brown	Y ✓ N	
	45	50	5	Sand, Medium , poorly-graded, compacted, no plasticity, Brown	Y ✓ N	
	50	58	8	Caliche, well cemented with medium sand matrix. Brown	Y ✓ N	
	58	73	15	Clayey Sand, Medium, Moderate plasticity, increasing clay, Brown	Y ✓ N	
	73	78	5	Caliche, with Sandy clay layering, mod plasticity, poorly-graded sand, White	Y ✓ N	
	78	83	5	Sand, Medium , poorly-graded, no plasticity, Light Brown	Y ✓ N	
	83	88	5	Clayey Sand, Medium, Moderate plasticity, decreasing clay, Red Brown	Y ✓ N	
	88	110	22	Sand, Fine , poorly-graded, no plasticity , Brown	Y ✓ N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
					Y N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP <input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input type="checkbox"/> OTHER - SPECIFY:					TOTAL ESTIMATED WELL YIELD (gpm): 0.00	

5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.
	MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from LTE on-site geologist.	
PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE: Shane Eldridge		

6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:		
		Jackie D. Atkins	10/07/2020
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME	DATE	

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/2017)	
FILE NO. C-4474	POD NO. 1	TRN NO. 677410	
LOCATION 245.30E.34.111	WELL TAG ID NO. —	PAGE 2 OF 2	






2020-10-05_C-4474POD1_OSE_Well Record and Log-forsign

Final Audit Report

2020-10-07

Created:	2020-10-07
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAEYXgwwt48YpaHuiUB0eJVri0E9M1MV9m

"2020-10-05_C-4474POD1_OSE_Well Record and Log-forsign" History

-  Document created by Lucas Middleton (lucas@atkinseng.com)
2020-10-07 - 4:31:15 PM GMT- IP address: 69.21.248.123
-  Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2020-10-07 - 4:32:21 PM GMT
-  Email viewed by Jack Atkins (jack@atkinseng.com)
2020-10-07 - 4:34:37 PM GMT- IP address: 74.50.153.115
-  Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2020-10-07 - 4:36:23 PM GMT - Time Source: server- IP address: 74.50.153.115
-  Agreement completed.
2020-10-07 - 4:36:23 PM GMT





2904 W 2nd St.
Roswell, NM 88201
voice: 575.624.2420
fax: 575.624.2421
www.atkinseng.com

10/07/2020

10/07/2020 10:07:01 AM

DII-NMOSE
1900 W 2nd Street
Roswell, NM 88201

Hand Delivered to the DII Office of the State Engineer

Re: Well Record C-4474 Pod1

To whom it may concern:

Attached please find a well record and a plugging record, in duplicate, for a one (1) soil borings, C-4474 Pod1.

If you have any questions, please contact me at 575.499.9244 or lucas@atkinseng.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Lucas Middleton". The signature is written in a cursive style.

Lucas Middleton

Enclosures: as noted above



APPENDIX B
Photographic Log



Photographic Log
XTO Energy, Inc.
Poker Lake Unit 301H
NAPP2322646789



Photograph 1 Date: 8/30/2023
Description: Release area during initial assessment.
View: West

Photograph 2 Date: 9/25/2023
Description: Excavation activities
View: East




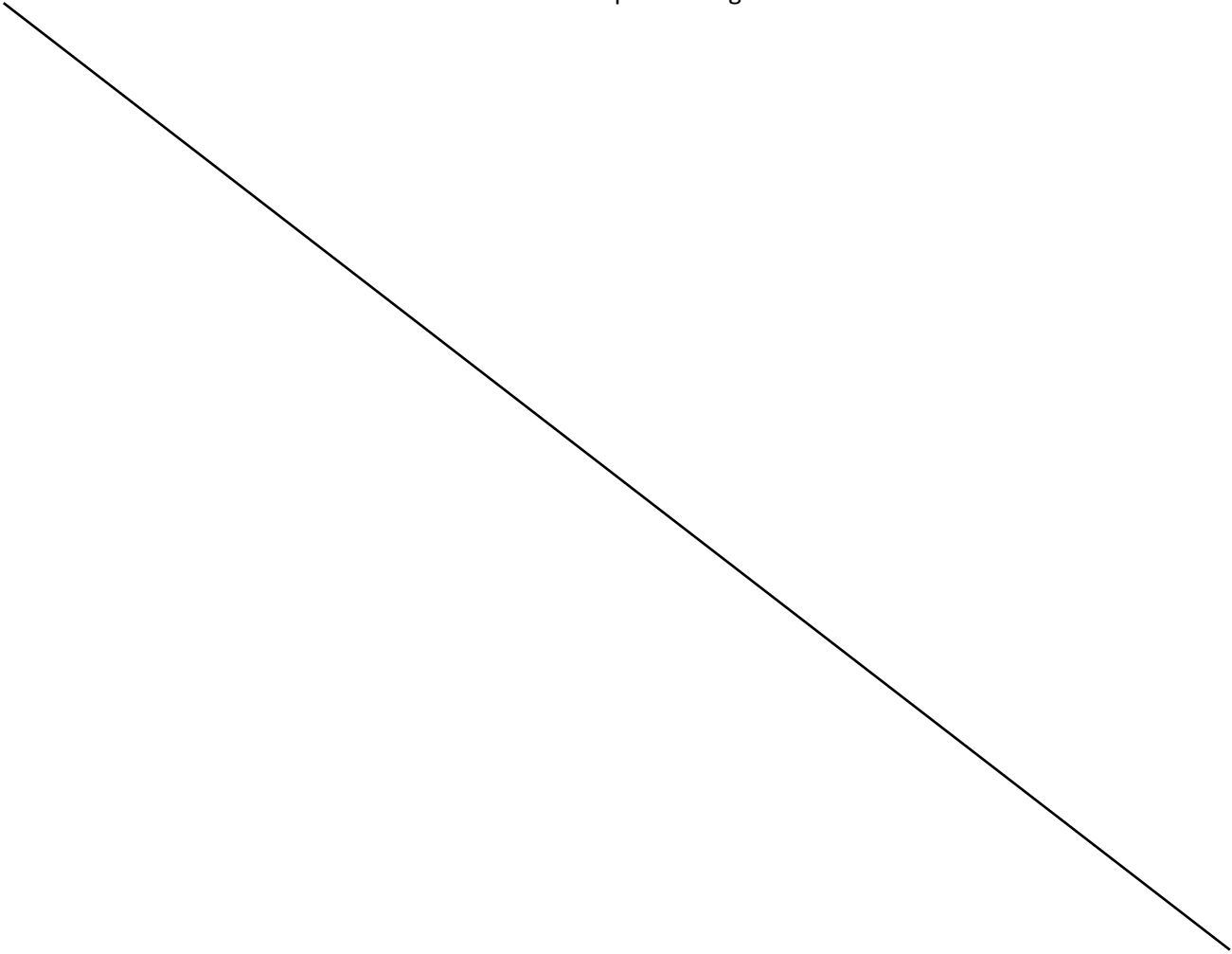
Photograph 3 Date: 9/26/2023
Description: Excavation activities
View: South


Photograph 4 Date: 9/27/2023
Description: Completed excavation
View: West


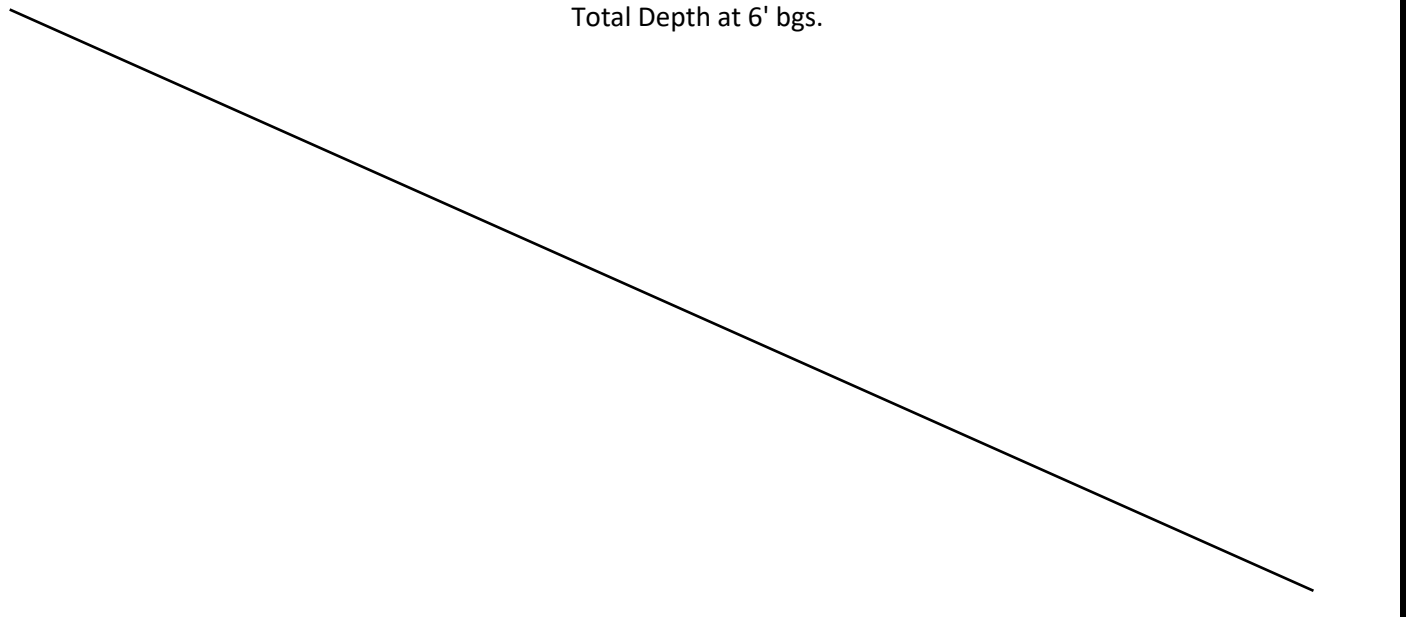


APPENDIX C

Lithologic Soil Sampling Logs

		Sample Name: PH01		Date: 9/25/2023					
		Site Name: Poker Lake Unit 301H							
		Incident Number: NAPP2322646789							
		Job Number: 03C1558268							
LITHOLOGIC / SOIL SAMPLING LOG									
Coordinates: 32.184314, -103.875373			Logged By: M. O'Dell		Method:				
			Hole Diameter: 3.5"		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. All chloride calculations made with a +40% correction factor.									
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions	
M	1,809	73	Y	SS01	0.5	0	SW	Sand. Brown, very fine to fine grained, well graded, very stained, moist.	
D	10,007	86	N		1	1	SW	Sand. Brown, very fine to fine grained, well graded, trace caliche.	
D	<162.4	0	N	PH01	2	2	CCHE	CCHE	
Total Depth at 2' bgs.									

					Sample Name: PH02		Date: 9/25/2023	
					Site Name: Poker Lake Unit 301H			
					Incident Number: NAPP2322646789			
					Job Number: 03C1558268			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: M. O'Dell		Method:	
Coordinates: 32.184342, -103.875284					Hole Diameter: 3.5"		Total Depth: 6'	
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. All chloride calculations made with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	12,006	154	Y	SS02	0.5		SW	Sand. Brown, very fine to fine grained, well graded, very stained, moist.
D	10,842	1,449	N		1		SW	Sand. Brown, very fine to fine grained, well graded, trace caliche.
D	16,486	252	N		2		CCHE	CCHE
D	683	23.1	N		3			
D	683	15.9	N	PH02	4			
D	453.6	38.7	N		5			
D	453.6	0.2	N	PH02A	6			
Total Depth at 6' bgs.								

					Sample Name: PH03		Date: 9/25/2023	
					Site Name: Poker Lake Unit 301H			
					Incident Number: NAPP2322646789			
					Job Number: 03C1558268			
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: M. O'Dell		Method:	
Coordinates: 32.184380, -103.875282					Hole Diameter: 3.5"		Total Depth: 6'	
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. All chloride calculations made with a +40% correction factor.								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
						0		
M	12,006	56.8	Y	SS03	0.5		SW	Sand. Brown, very fine to fine grained, well graded, very stained, moist.
D	16,486	1586	N		1	1	SW	Sand. Brown, very fine to fine grained, well graded, trace caliche.
D	19,768	868	N		2	2	CCHE	CCHE
D	10,007	37.8	N		3	3		
D	5,729	179.9	N	PH03	4	4		
D	856.8	10.9	N		5	5		
D	856.8	0.8	N	PH03A	6	6		
Total Depth at 6' bgs.								
								



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 9/12/2023 11:39:19 AM Revision 1

JOB DESCRIPTION

Poker Lake Unit 301H
SDG NUMBER 03C1558268

JOB NUMBER

890-5190-1



Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
9/12/2023 11:39:19 AM
Revision 1

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

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Laboratory Job ID: 890-5190-1
SDG: 03C1558268

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Method Summary	30
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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Job ID: 890-5190-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-5190-1

REVISION

The report being provided is a revision of the original report sent on 9/7/2023. The report (revision 1) is being revised due to Per client email, requesting chloride re runs on samples 005 and 006.

Receipt

The samples were received on 9/1/2023 8:11 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: SS01 (890-5190-1), SS02 (890-5190-2), SS03 (890-5190-3), SS04 (890-5190-4), SS05 (890-5190-5), SS06 (890-5190-6) and SS07 (890-5190-7).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-61799 and analytical batch 880-61791 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-5190-A-4-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS01 (890-5190-1), SS02 (890-5190-2) and SS03 (890-5190-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-61771 and analytical batch 880-61784 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS06 (890-5190-6), SS07 (890-5190-7), (890-5185-A-9-C), (890-5185-A-9-D MS) and (890-5185-A-9-E MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (LCSD 880-61771/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-61771 and analytical batch 880-61784 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-61797 and analytical batch 880-61786 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: SS01 (890-5190-1), SS02 (890-5190-2), SS04 (890-5190-4), SS05 (890-5190-5), (890-5188-A-4-B) and (890-5188-A-4-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-61786/20), (CCV

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Job ID: 890-5190-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

880-61786/31) and (CCV 880-61786/5). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

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- 2
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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301HJob ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS01

Lab Sample ID: 890-5190-1

Date Collected: 08/30/23 09:30

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.106		0.0201	mg/Kg		09/06/23 08:31	09/06/23 20:17	10
Toluene	0.0234		0.0201	mg/Kg		09/06/23 08:31	09/06/23 20:17	10
Ethylbenzene	0.0422		0.0201	mg/Kg		09/06/23 08:31	09/06/23 20:17	10
m-Xylene & p-Xylene	0.475		0.0402	mg/Kg		09/06/23 08:31	09/06/23 20:17	10
o-Xylene	0.405		0.0201	mg/Kg		09/06/23 08:31	09/06/23 20:17	10
Xylenes, Total	0.880		0.0402	mg/Kg		09/06/23 08:31	09/06/23 20:17	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	191	S1+	70 - 130	09/06/23 08:31	09/06/23 20:17	10
1,4-Difluorobenzene (Surr)	121		70 - 130	09/06/23 08:31	09/06/23 20:17	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.05		0.0402	mg/Kg			09/07/23 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3530		50.1	mg/Kg			09/06/23 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		09/05/23 09:43	09/05/23 18:26	1
Diesel Range Organics (Over C10-C28)	3290		50.1	mg/Kg		09/05/23 09:43	09/05/23 18:26	1
Oil Range Organics (Over C28-C36)	237		50.1	mg/Kg		09/05/23 09:43	09/05/23 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	26	S1-	70 - 130	09/05/23 09:43	09/05/23 18:26	1
o-Terphenyl	50	S1-	70 - 130	09/05/23 09:43	09/05/23 18:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2750		25.0	mg/Kg			09/06/23 16:24	5

Client Sample ID: SS02

Lab Sample ID: 890-5190-2

Date Collected: 08/30/23 09:35

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0202	U	0.0202	mg/Kg		09/06/23 08:31	09/06/23 20:38	10
Toluene	0.247		0.0202	mg/Kg		09/06/23 08:31	09/06/23 20:38	10
Ethylbenzene	0.0758		0.0202	mg/Kg		09/06/23 08:31	09/06/23 20:38	10
m-Xylene & p-Xylene	1.44		0.0403	mg/Kg		09/06/23 08:31	09/06/23 20:38	10
o-Xylene	0.666		0.0202	mg/Kg		09/06/23 08:31	09/06/23 20:38	10
Xylenes, Total	2.11		0.0403	mg/Kg		09/06/23 08:31	09/06/23 20:38	10

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301HJob ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS02

Lab Sample ID: 890-5190-2

Date Collected: 08/30/23 09:35

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	154	S1+	70 - 130	09/06/23 08:31	09/06/23 20:38	10
1,4-Difluorobenzene (Surr)	112		70 - 130	09/06/23 08:31	09/06/23 20:38	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	2.43		0.0403	mg/Kg			09/07/23 10:57	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3200		50.5	mg/Kg			09/06/23 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	128		50.5	mg/Kg		09/05/23 09:43	09/05/23 18:48	1
Diesel Range Organics (Over C10-C28)	2850		50.5	mg/Kg		09/05/23 09:43	09/05/23 18:48	1
Oil Range Organics (Over C28-C36)	222		50.5	mg/Kg		09/05/23 09:43	09/05/23 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	34	S1-	70 - 130	09/05/23 09:43	09/05/23 18:48	1
o-Terphenyl	39	S1-	70 - 130	09/05/23 09:43	09/05/23 18:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1030		5.00	mg/Kg			09/06/23 16:30	1

Client Sample ID: SS03

Lab Sample ID: 890-5190-3

Date Collected: 08/30/23 09:40

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0199	U	0.0199	mg/Kg		09/06/23 08:31	09/06/23 20:59	10
Toluene	<0.0199	U	0.0199	mg/Kg		09/06/23 08:31	09/06/23 20:59	10
Ethylbenzene	<0.0199	U	0.0199	mg/Kg		09/06/23 08:31	09/06/23 20:59	10
m-Xylene & p-Xylene	<0.0398	U	0.0398	mg/Kg		09/06/23 08:31	09/06/23 20:59	10
o-Xylene	0.0289		0.0199	mg/Kg		09/06/23 08:31	09/06/23 20:59	10
Xylenes, Total	<0.0398	U	0.0398	mg/Kg		09/06/23 08:31	09/06/23 20:59	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	159	S1+	70 - 130	09/06/23 08:31	09/06/23 20:59	10
1,4-Difluorobenzene (Surr)	123		70 - 130	09/06/23 08:31	09/06/23 20:59	10

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.0398	U	0.0398	mg/Kg			09/07/23 10:57	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS03
Date Collected: 08/30/23 09:40
Date Received: 09/01/23 08:11
Sample Depth: 0.5

Lab Sample ID: 890-5190-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	660		50.5	mg/Kg			09/06/23 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		09/05/23 09:43	09/05/23 19:11	1
Diesel Range Organics (Over C10-C28)	593		50.5	mg/Kg		09/05/23 09:43	09/05/23 19:11	1
Oil Range Organics (Over C28-C36)	66.5		50.5	mg/Kg		09/05/23 09:43	09/05/23 19:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			09/05/23 09:43	09/05/23 19:11	1
o-Terphenyl	128		70 - 130			09/05/23 09:43	09/05/23 19:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7290		50.4	mg/Kg			09/06/23 16:37	10

Client Sample ID: SS04
Date Collected: 08/30/23 09:45
Date Received: 09/01/23 08:11
Sample Depth: 0.5

Lab Sample ID: 890-5190-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
m-Xylene & p-Xylene	<0.00396	U F1	0.00396	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
Xylenes, Total	<0.00396	U F1	0.00396	mg/Kg		09/05/23 10:29	09/05/23 12:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			09/05/23 10:29	09/05/23 12:28	1
1,4-Difluorobenzene (Surr)	92		70 - 130			09/05/23 10:29	09/05/23 12:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			09/05/23 17:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	72.1		49.8	mg/Kg			09/06/23 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/05/23 09:43	09/05/23 19:33	1
Diesel Range Organics (Over C10-C28)	72.1		49.8	mg/Kg		09/05/23 09:43	09/05/23 19:33	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/05/23 09:43	09/05/23 19:33	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301HJob ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS04

Date Collected: 08/30/23 09:45

Date Received: 09/01/23 08:11

Sample Depth: 0.5

Lab Sample ID: 890-5190-4

Matrix: Solid

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130	09/05/23 09:43	09/05/23 19:33	1
o-Terphenyl	133	S1+	70 - 130	09/05/23 09:43	09/05/23 19:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	515		4.96	mg/Kg			09/06/23 17:09	1

Client Sample ID: SS05

Date Collected: 08/30/23 09:50

Date Received: 09/01/23 08:11

Sample Depth: 0.5

Lab Sample ID: 890-5190-5

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 12:49	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 12:49	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 12:49	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/05/23 10:29	09/05/23 12:49	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 12:49	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/05/23 10:29	09/05/23 12:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/05/23 10:29	09/05/23 12:49	1
1,4-Difluorobenzene (Surr)	73		70 - 130	09/05/23 10:29	09/05/23 12:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/05/23 17:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.1		49.6	mg/Kg			09/06/23 09:47	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		09/05/23 09:43	09/05/23 19:56	1
Diesel Range Organics (Over C10-C28)	55.1		49.6	mg/Kg		09/05/23 09:43	09/05/23 19:56	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		09/05/23 09:43	09/05/23 19:56	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	168	S1+	70 - 130	09/05/23 09:43	09/05/23 19:56	1
o-Terphenyl	186	S1+	70 - 130	09/05/23 09:43	09/05/23 19:56	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	683		4.98	mg/Kg			09/08/23 21:35	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301HJob ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS06

Lab Sample ID: 890-5190-6

Date Collected: 08/30/23 09:55

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 13:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 13:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 13:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/05/23 10:29	09/05/23 13:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/05/23 10:29	09/05/23 13:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/05/23 10:29	09/05/23 13:09	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/05/23 10:29	09/05/23 13:09	1
1,4-Difluorobenzene (Surr)	71		70 - 130	09/05/23 10:29	09/05/23 13:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/05/23 17:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			09/06/23 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		09/05/23 09:38	09/05/23 18:26	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		09/05/23 09:38	09/05/23 18:26	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		09/05/23 09:38	09/05/23 18:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130	09/05/23 09:38	09/05/23 18:26	1
o-Terphenyl	131	S1+	70 - 130	09/05/23 09:38	09/05/23 18:26	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	529		5.04	mg/Kg			09/08/23 21:40	1

Client Sample ID: SS07

Lab Sample ID: 890-5190-7

Date Collected: 08/30/23 10:00

Matrix: Solid

Date Received: 09/01/23 08:11

Sample Depth: 0.5

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 13:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 13:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 13:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/05/23 10:29	09/05/23 13:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 13:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/05/23 10:29	09/05/23 13:30	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	09/05/23 10:29	09/05/23 13:30	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

Client Sample ID: SS07
Date Collected: 08/30/23 10:00
Date Received: 09/01/23 08:11
Sample Depth: 0.5

Lab Sample ID: 890-5190-7
Matrix: Solid

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	73		70 - 130	09/05/23 10:29	09/05/23 13:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/05/23 17:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/06/23 09:18	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/05/23 09:38	09/05/23 18:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/05/23 09:38	09/05/23 18:48	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/05/23 09:38	09/05/23 18:48	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	148	S1+	70 - 130	09/05/23 09:38	09/05/23 18:48	1
o-Terphenyl	130		70 - 130	09/05/23 09:38	09/05/23 18:48	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	255		5.01	mg/Kg			09/06/23 17:28	1

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
890-5189-A-2-D MS	Matrix Spike	110	100
890-5189-A-2-E MSD	Matrix Spike Duplicate	111	100
890-5190-1	SS01	191 S1+	121
890-5190-2	SS02	154 S1+	112
890-5190-3	SS03	159 S1+	123
890-5190-4	SS04	84	92
890-5190-4 MS	SS04	137 S1+	115
890-5190-4 MSD	SS04	125	111
890-5190-5	SS05	96	73
890-5190-6	SS06	97	71
890-5190-7	SS07	95	73
LCS 880-61799/1-A	Lab Control Sample	121	119
LCS 880-61899/1-A	Lab Control Sample	97	102
LCSD 880-61799/2-A	Lab Control Sample Dup	123	117
LCSD 880-61899/2-A	Lab Control Sample Dup	107	94
MB 880-61799/5-A	Method Blank	74	99
MB 880-61899/5-A	Method Blank	78	92

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5185-A-9-D MS	Matrix Spike	152 S1+	120
890-5185-A-9-E MSD	Matrix Spike Duplicate	153 S1+	116
890-5188-A-4-C MS	Matrix Spike	127	129
890-5188-A-4-D MSD	Matrix Spike Duplicate	145 S1+	141 S1+
890-5190-1	SS01	26 S1-	50 S1-
890-5190-2	SS02	34 S1-	39 S1-
890-5190-3	SS03	123	128
890-5190-4	SS04	123	133 S1+
890-5190-5	SS05	168 S1+	186 S1+
890-5190-6	SS06	148 S1+	131 S1+
890-5190-7	SS07	148 S1+	130
LCS 880-61771/2-A	Lab Control Sample	124	127
LCS 880-61797/2-A	Lab Control Sample	93	109
LCSD 880-61771/3-A	Lab Control Sample Dup	135 S1+	119
LCSD 880-61797/3-A	Lab Control Sample Dup	85	97
MB 880-61771/1-A	Method Blank	164 S1+	151 S1+
MB 880-61797/1-A	Method Blank	132 S1+	151 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-61799/5-A
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61799

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 12:06	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 12:06	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 12:06	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/05/23 10:29	09/05/23 12:06	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/05/23 10:29	09/05/23 12:06	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/05/23 10:29	09/05/23 12:06	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130	09/05/23 10:29	09/05/23 12:06	1
1,4-Difluorobenzene (Surr)	99		70 - 130	09/05/23 10:29	09/05/23 12:06	1

Lab Sample ID: LCS 880-61799/1-A
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1028		mg/Kg		103	70 - 130
Toluene	0.100	0.1080		mg/Kg		108	70 - 130
Ethylbenzene	0.100	0.1097		mg/Kg		110	70 - 130
m-Xylene & p-Xylene	0.200	0.2472		mg/Kg		124	70 - 130
o-Xylene	0.100	0.1205		mg/Kg		121	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	121		70 - 130
1,4-Difluorobenzene (Surr)	119		70 - 130

Lab Sample ID: LCSD 880-61799/2-A
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61799

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1042		mg/Kg		104	70 - 130	1	35
Toluene	0.100	0.1144		mg/Kg		114	70 - 130	6	35
Ethylbenzene	0.100	0.1143		mg/Kg		114	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2559		mg/Kg		128	70 - 130	3	35
o-Xylene	0.100	0.1254		mg/Kg		125	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: 890-5190-4 MS
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: SS04
Prep Type: Total/NA
Prep Batch: 61799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0996	0.1033		mg/Kg		103	70 - 130
Toluene	<0.00198	U	0.0996	0.1126		mg/Kg		113	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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

Lab Sample ID: 890-5190-4 MS
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: SS04
Prep Type: Total/NA
Prep Batch: 61799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0996	0.1180		mg/Kg		118	70 - 130
m-Xylene & p-Xylene	<0.00396	U F1	0.199	0.2652	F1	mg/Kg		133	70 - 130
o-Xylene	<0.00198	U	0.0996	0.1281		mg/Kg		129	70 - 130

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	115		70 - 130

Lab Sample ID: 890-5190-4 MSD
Matrix: Solid
Analysis Batch: 61791

Client Sample ID: SS04
Prep Type: Total/NA
Prep Batch: 61799

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00198	U	0.101	0.1051		mg/Kg		103	70 - 130	2	35
Toluene	<0.00198	U	0.101	0.1127		mg/Kg		112	70 - 130	0	35
Ethylbenzene	<0.00198	U	0.101	0.1122		mg/Kg		111	70 - 130	5	35
m-Xylene & p-Xylene	<0.00396	U F1	0.202	0.2489		mg/Kg		123	70 - 130	6	35
o-Xylene	<0.00198	U	0.101	0.1211		mg/Kg		120	70 - 130	6	35

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	125		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: MB 880-61899/5-A
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61899

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/06/23 08:31	09/06/23 11:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/06/23 08:31	09/06/23 11:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/06/23 08:31	09/06/23 11:21	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/06/23 08:31	09/06/23 11:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/06/23 08:31	09/06/23 11:21	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/06/23 08:31	09/06/23 11:21	1

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	09/06/23 08:31	09/06/23 11:21	1
1,4-Difluorobenzene (Surr)	92		70 - 130	09/06/23 08:31	09/06/23 11:21	1

Lab Sample ID: LCS 880-61899/1-A
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1055		mg/Kg		106	70 - 130
Toluene	0.100	0.1026		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.1021		mg/Kg		102	70 - 130
m-Xylene & p-Xylene	0.200	0.2074		mg/Kg		104	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-61899/1-A
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61899

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.09836		mg/Kg		98	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	97		70 - 130				
1,4-Difluorobenzene (Surr)	102		70 - 130				

Lab Sample ID: LCSD 880-61899/2-A
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61899

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09332		mg/Kg		93	70 - 130	12	35
Toluene	0.100	0.1018		mg/Kg		102	70 - 130	1	35
Ethylbenzene	0.100	0.1068		mg/Kg		107	70 - 130	4	35
m-Xylene & p-Xylene	0.200	0.2299		mg/Kg		115	70 - 130	10	35
o-Xylene	0.100	0.1079		mg/Kg		108	70 - 130	9	35
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	107		70 - 130						
1,4-Difluorobenzene (Surr)	94		70 - 130						

Lab Sample ID: 890-5189-A-2-D MS
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61899

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0996	0.09806		mg/Kg		98	70 - 130
Toluene	<0.00198	U	0.0996	0.1078		mg/Kg		108	70 - 130
Ethylbenzene	<0.00198	U	0.0996	0.1153		mg/Kg		116	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.199	0.2417		mg/Kg		121	70 - 130
o-Xylene	<0.00198	U	0.0996	0.1143		mg/Kg		115	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
4-Bromofluorobenzene (Surr)	110		70 - 130						
1,4-Difluorobenzene (Surr)	100		70 - 130						

Lab Sample ID: 890-5189-A-2-E MSD
Matrix: Solid
Analysis Batch: 61898

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 61899

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00198	U	0.0994	0.09366		mg/Kg		94	70 - 130	5	35
Toluene	<0.00198	U	0.0994	0.1039		mg/Kg		104	70 - 130	4	35
Ethylbenzene	<0.00198	U	0.0994	0.1126		mg/Kg		113	70 - 130	2	35
m-Xylene & p-Xylene	<0.00396	U	0.199	0.2392		mg/Kg		120	70 - 130	1	35
o-Xylene	<0.00198	U	0.0994	0.1136		mg/Kg		114	70 - 130	1	35

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QC Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

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

Lab Sample ID: 890-5189-A-2-E MSD
 Matrix: Solid
 Analysis Batch: 61898

Client Sample ID: Matrix Spike Duplicate
 Prep Type: Total/NA
 Prep Batch: 61899

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

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

Lab Sample ID: MB 880-61771/1-A
 Matrix: Solid
 Analysis Batch: 61784

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 61771

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		09/01/23 15:18	09/05/23 08:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/01/23 15:18	09/05/23 08:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/23 15:18	09/05/23 08:20	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	164	S1+	70 - 130	09/01/23 15:18	09/05/23 08:20	1
o-Terphenyl	151	S1+	70 - 130	09/01/23 15:18	09/05/23 08:20	1

Lab Sample ID: LCS 880-61771/2-A
 Matrix: Solid
 Analysis Batch: 61784

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 61771

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1128		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1049		mg/Kg		105	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	124		70 - 130
o-Terphenyl	127		70 - 130

Lab Sample ID: LCSD 880-61771/3-A
 Matrix: Solid
 Analysis Batch: 61784

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 61771

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1176		mg/Kg		118	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1013		mg/Kg		101	70 - 130	4	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	135	S1+	70 - 130
o-Terphenyl	119		70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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

Lab Sample ID: 890-5185-A-9-D MS
Matrix: Solid
Analysis Batch: 61784

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61771

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	991	1070		mg/Kg		104	70 - 130
Diesel Range Organics (Over C10-C28)	<49.6	U F1	991	1441	F1	mg/Kg		142	70 - 130
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	152	S1+	70 - 130						
o-Terphenyl	120		70 - 130						

Lab Sample ID: 890-5185-A-9-E MSD
Matrix: Solid
Analysis Batch: 61784

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 61771

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	991	1070		mg/Kg		104	70 - 130	0	20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	991	1406	F1	mg/Kg		138	70 - 130	2	20
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	153	S1+	70 - 130								
o-Terphenyl	116		70 - 130								

Lab Sample ID: MB 880-61797/1-A
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 61797

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		09/05/23 07:40	09/05/23 08:20	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/05/23 07:40	09/05/23 08:20	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/05/23 07:40	09/05/23 08:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	132	S1+	70 - 130			09/05/23 07:40	09/05/23 08:20	1
o-Terphenyl	151	S1+	70 - 130			09/05/23 07:40	09/05/23 08:20	1

Lab Sample ID: LCS 880-61797/2-A
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	973.8		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	967.7		mg/Kg		97	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-61797/2-A
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 61797

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	93		70 - 130
o-Terphenyl	109		70 - 130

Lab Sample ID: LCSD 880-61797/3-A
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 61797

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	831.1		mg/Kg		83	70 - 130	16	20	
Diesel Range Organics (Over C10-C28)	1000	822.5		mg/Kg		82	70 - 130	16	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	85		70 - 130
o-Terphenyl	97		70 - 130

Lab Sample ID: 890-5188-A-4-C MS
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 61797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	998	924.8		mg/Kg		88	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1076		mg/Kg		104	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	127		70 - 130
o-Terphenyl	129		70 - 130

Lab Sample ID: 890-5188-A-4-D MSD
Matrix: Solid
Analysis Batch: 61786

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 61797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	998	1082		mg/Kg		104	70 - 130	16	20	
Diesel Range Organics (Over C10-C28)	<50.5	U	998	1220		mg/Kg		119	70 - 130	12	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	145	S1+	70 - 130
o-Terphenyl	141	S1+	70 - 130

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QC Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-61800/1-A
 Matrix: Solid
 Analysis Batch: 61917

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			09/06/23 14:29	1

Lab Sample ID: LCS 880-61800/2-A
 Matrix: Solid
 Analysis Batch: 61917

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	250.8		mg/Kg		100	90 - 110

Lab Sample ID: LCSD 880-61800/3-A
 Matrix: Solid
 Analysis Batch: 61917

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	248.3		mg/Kg		99	90 - 110	1	20

Lab Sample ID: 890-5190-3 MS
 Matrix: Solid
 Analysis Batch: 61917

Client Sample ID: SS03
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	7290		2520	9720		mg/Kg		96	90 - 110

Lab Sample ID: 890-5190-3 MSD
 Matrix: Solid
 Analysis Batch: 61917

Client Sample ID: SS03
 Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	7290		2520	9713		mg/Kg		96	90 - 110	0	20

Lab Sample ID: MB 880-62029/1-A
 Matrix: Solid
 Analysis Batch: 62247

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			09/08/23 20:19	1

Lab Sample ID: LCS 880-62029/2-A
 Matrix: Solid
 Analysis Batch: 62247

Client Sample ID: Lab Control Sample
 Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	247.2		mg/Kg		99	90 - 110

Lab Sample ID: LCSD 880-62029/3-A
 Matrix: Solid
 Analysis Batch: 62247

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	245.8		mg/Kg		98	90 - 110	1	20

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QC Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 880-33017-A-1-B MS
Matrix: Solid
Analysis Batch: 62247

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	578		249	818.5		mg/Kg		97	90 - 110

Lab Sample ID: 880-33017-A-1-C MSD
Matrix: Solid
Analysis Batch: 62247

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	578		249	811.9		mg/Kg		94	90 - 110	1	20

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

GC VOA

Analysis Batch: 61791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-4	SS04	Total/NA	Solid	8021B	61799
890-5190-5	SS05	Total/NA	Solid	8021B	61799
890-5190-6	SS06	Total/NA	Solid	8021B	61799
890-5190-7	SS07	Total/NA	Solid	8021B	61799
MB 880-61799/5-A	Method Blank	Total/NA	Solid	8021B	61799
LCS 880-61799/1-A	Lab Control Sample	Total/NA	Solid	8021B	61799
LCSD 880-61799/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	61799
890-5190-4 MS	SS04	Total/NA	Solid	8021B	61799
890-5190-4 MSD	SS04	Total/NA	Solid	8021B	61799

Prep Batch: 61799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-4	SS04	Total/NA	Solid	5035	
890-5190-5	SS05	Total/NA	Solid	5035	
890-5190-6	SS06	Total/NA	Solid	5035	
890-5190-7	SS07	Total/NA	Solid	5035	
MB 880-61799/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-61799/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-61799/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5190-4 MS	SS04	Total/NA	Solid	5035	
890-5190-4 MSD	SS04	Total/NA	Solid	5035	

Analysis Batch: 61880

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	Total BTEX	
890-5190-2	SS02	Total/NA	Solid	Total BTEX	
890-5190-3	SS03	Total/NA	Solid	Total BTEX	
890-5190-4	SS04	Total/NA	Solid	Total BTEX	
890-5190-5	SS05	Total/NA	Solid	Total BTEX	
890-5190-6	SS06	Total/NA	Solid	Total BTEX	
890-5190-7	SS07	Total/NA	Solid	Total BTEX	

Analysis Batch: 61898

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	8021B	61899
890-5190-2	SS02	Total/NA	Solid	8021B	61899
890-5190-3	SS03	Total/NA	Solid	8021B	61899
MB 880-61899/5-A	Method Blank	Total/NA	Solid	8021B	61899
LCS 880-61899/1-A	Lab Control Sample	Total/NA	Solid	8021B	61899
LCSD 880-61899/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	61899
890-5189-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	61899
890-5189-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	61899

Prep Batch: 61899

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	5035	
890-5190-2	SS02	Total/NA	Solid	5035	
890-5190-3	SS03	Total/NA	Solid	5035	
MB 880-61899/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-61899/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-61899/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

GC VOA (Continued)

Prep Batch: 61899 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5189-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
890-5189-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

GC Semi VOA

Prep Batch: 61771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-6	SS06	Total/NA	Solid	8015NM Prep	
890-5190-7	SS07	Total/NA	Solid	8015NM Prep	
MB 880-61771/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61771/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-61771/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5185-A-9-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5185-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 61784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-6	SS06	Total/NA	Solid	8015B NM	61771
890-5190-7	SS07	Total/NA	Solid	8015B NM	61771
MB 880-61771/1-A	Method Blank	Total/NA	Solid	8015B NM	61771
LCS 880-61771/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61771
LCSD 880-61771/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61771
890-5185-A-9-D MS	Matrix Spike	Total/NA	Solid	8015B NM	61771
890-5185-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	61771

Analysis Batch: 61786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	8015B NM	61797
890-5190-2	SS02	Total/NA	Solid	8015B NM	61797
890-5190-3	SS03	Total/NA	Solid	8015B NM	61797
890-5190-4	SS04	Total/NA	Solid	8015B NM	61797
890-5190-5	SS05	Total/NA	Solid	8015B NM	61797
MB 880-61797/1-A	Method Blank	Total/NA	Solid	8015B NM	61797
LCS 880-61797/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	61797
LCSD 880-61797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	61797
890-5188-A-4-C MS	Matrix Spike	Total/NA	Solid	8015B NM	61797
890-5188-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	61797

Prep Batch: 61797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	8015NM Prep	
890-5190-2	SS02	Total/NA	Solid	8015NM Prep	
890-5190-3	SS03	Total/NA	Solid	8015NM Prep	
890-5190-4	SS04	Total/NA	Solid	8015NM Prep	
890-5190-5	SS05	Total/NA	Solid	8015NM Prep	
MB 880-61797/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-61797/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-61797/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5188-A-4-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5188-A-4-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

GC Semi VOA

Analysis Batch: 61909

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Total/NA	Solid	8015 NM	
890-5190-2	SS02	Total/NA	Solid	8015 NM	
890-5190-3	SS03	Total/NA	Solid	8015 NM	
890-5190-4	SS04	Total/NA	Solid	8015 NM	
890-5190-5	SS05	Total/NA	Solid	8015 NM	
890-5190-6	SS06	Total/NA	Solid	8015 NM	
890-5190-7	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 61800

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Soluble	Solid	DI Leach	
890-5190-2	SS02	Soluble	Solid	DI Leach	
890-5190-3	SS03	Soluble	Solid	DI Leach	
890-5190-4	SS04	Soluble	Solid	DI Leach	
890-5190-7	SS07	Soluble	Solid	DI Leach	
MB 880-61800/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-61800/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-61800/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5190-3 MS	SS03	Soluble	Solid	DI Leach	
890-5190-3 MSD	SS03	Soluble	Solid	DI Leach	

Analysis Batch: 61917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-1	SS01	Soluble	Solid	300.0	61800
890-5190-2	SS02	Soluble	Solid	300.0	61800
890-5190-3	SS03	Soluble	Solid	300.0	61800
890-5190-4	SS04	Soluble	Solid	300.0	61800
890-5190-7	SS07	Soluble	Solid	300.0	61800
MB 880-61800/1-A	Method Blank	Soluble	Solid	300.0	61800
LCS 880-61800/2-A	Lab Control Sample	Soluble	Solid	300.0	61800
LCSD 880-61800/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	61800
890-5190-3 MS	SS03	Soluble	Solid	300.0	61800
890-5190-3 MSD	SS03	Soluble	Solid	300.0	61800

Leach Batch: 62029

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-5	SS05	Soluble	Solid	DI Leach	
890-5190-6	SS06	Soluble	Solid	DI Leach	
MB 880-62029/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-62029/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-62029/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-33017-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-33017-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 62247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5190-5	SS05	Soluble	Solid	300.0	62029
890-5190-6	SS06	Soluble	Solid	300.0	62029
MB 880-62029/1-A	Method Blank	Soluble	Solid	300.0	62029

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

HPLC/IC (Continued)

Analysis Batch: 62247 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-62029/2-A	Lab Control Sample	Soluble	Solid	300.0	62029
LCSD 880-62029/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	62029
880-33017-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	62029
880-33017-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	62029

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Lab Chronicle

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

Client Sample ID: SS01

Lab Sample ID: 890-5190-1

Date Collected: 08/30/23 09:30

Matrix: Solid

Date Received: 09/01/23 08:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	61899	09/06/23 08:31	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	61898	09/06/23 20:17	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/07/23 10:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 18:26	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61800	09/05/23 10:30	SMC	EET MID
Soluble	Analysis	300.0		5			61917	09/06/23 16:24	CH	EET MID

Client Sample ID: SS02

Lab Sample ID: 890-5190-2

Date Collected: 08/30/23 09:35

Matrix: Solid

Date Received: 09/01/23 08:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	61899	09/06/23 08:31	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	61898	09/06/23 20:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/07/23 10:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 18:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	61800	09/05/23 10:30	SMC	EET MID
Soluble	Analysis	300.0		1			61917	09/06/23 16:30	CH	EET MID

Client Sample ID: SS03

Lab Sample ID: 890-5190-3

Date Collected: 08/30/23 09:40

Matrix: Solid

Date Received: 09/01/23 08:11

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	61899	09/06/23 08:31	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	61898	09/06/23 20:59	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/07/23 10:57	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 19:11	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	61800	09/05/23 10:30	SMC	EET MID
Soluble	Analysis	300.0		10			61917	09/06/23 16:37	CH	EET MID

Client Sample ID: SS04

Lab Sample ID: 890-5190-4

Date Collected: 08/30/23 09:45

Matrix: Solid

Date Received: 09/01/23 08:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	61799	09/05/23 10:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61791	09/05/23 12:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/05/23 17:40	SM	EET MID

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Lab Chronicle

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
 SDG: 03C1558268

Client Sample ID: SS04
Date Collected: 08/30/23 09:45
Date Received: 09/01/23 08:11

Lab Sample ID: 890-5190-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 19:33	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	61800	09/05/23 10:30	SMC	EET MID
Soluble	Analysis	300.0		1			61917	09/06/23 17:09	CH	EET MID

Client Sample ID: SS05
Date Collected: 08/30/23 09:50
Date Received: 09/01/23 08:11

Lab Sample ID: 890-5190-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	61799	09/05/23 10:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61791	09/05/23 12:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/05/23 17:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	61797	09/05/23 09:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61786	09/05/23 19:56	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	62029	09/08/23 07:58	CH	EET MID
Soluble	Analysis	300.0		1			62247	09/08/23 21:35	CH	EET MID

Client Sample ID: SS06
Date Collected: 08/30/23 09:55
Date Received: 09/01/23 08:11

Lab Sample ID: 890-5190-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	61799	09/05/23 10:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61791	09/05/23 13:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/05/23 17:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:18	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	61771	09/05/23 09:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61784	09/05/23 18:26	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	62029	09/08/23 07:58	CH	EET MID
Soluble	Analysis	300.0		1			62247	09/08/23 21:40	CH	EET MID

Client Sample ID: SS07
Date Collected: 08/30/23 10:00
Date Received: 09/01/23 08:11

Lab Sample ID: 890-5190-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	61799	09/05/23 10:29	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	61791	09/05/23 13:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			61880	09/05/23 17:40	SM	EET MID
Total/NA	Analysis	8015 NM		1			61909	09/06/23 09:18	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	61771	09/05/23 09:38	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	61784	09/05/23 18:48	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Client Sample ID: SS07

Lab Sample ID: 890-5190-7

Date Collected: 08/30/23 10:00

Matrix: Solid

Date Received: 09/01/23 08:11

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	61800	09/05/23 10:30	SMC	EET MID
Soluble	Analysis	300.0		1			61917	09/06/23 17:28	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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	T104704400-23-26	06-30-24

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

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

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Method Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5190-1
SDG: 03C1558268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5190-1	SS01	Solid	08/30/23 09:30	09/01/23 08:11	0.5
890-5190-2	SS02	Solid	08/30/23 09:35	09/01/23 08:11	0.5
890-5190-3	SS03	Solid	08/30/23 09:40	09/01/23 08:11	0.5
890-5190-4	SS04	Solid	08/30/23 09:45	09/01/23 08:11	0.5
890-5190-5	SS05	Solid	08/30/23 09:50	09/01/23 08:11	0.5
890-5190-6	SS06	Solid	08/30/23 09:55	09/01/23 08:11	0.5
890-5190-7	SS07	Solid	08/30/23 10:00	09/01/23 08:11	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

Environment Testing
Xenco



Work Order No: _____

www.xenco.com Page _____ of _____

Project Manager:	Ben Bellil	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy, Inc
Address:	3122 Nat'l Parks Hwy	Address:	3104 E Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989.854.0852	Email:	bbellil@ensolum.com
Project Name:	Poker Lakel Unit 301H	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:	03CL558268	Due Date:	3/23/23
Project Location:	32.18436, -103.87523	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Meredith Roberts	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
P.O. #:		Thermometer ID:	77mm007
SAMPLE RECEIPT		Correction Factor:	-0.2
Samples Received Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Temperature Reading:	46.0
Cooler Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Corrected Temperature:	3.8
Sample Custody Seals:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
Total Containers:			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes
							BTEX	TPH			
SS01	S	8/30/23	0930	0.5'	G	1	X	X		None: NO DI Water: H ₂ O	
SS02			0935				X	X		Cool: Cool MeOH: Me	
SS03			0940				X	X		HCL: HC HNO ₃ : HN	
SS04			0945				X	X		H ₂ SO ₄ : H ₂ NaOH: Na	
SS05			0950				X	X		H ₂ PO ₄ : HP NaHSO ₄ : NABIS	
SS06			0955				X	X		Na ₂ S ₂ O ₃ : NaSO ₃	
SS07			1000				X	X		Zn Acetate+NaOH: Zn NaOH+Ascorbic Acid: SACP	
Incident #: NAPP2322646789 Cost Center: 1138881001 mroberts@ensolum.com											

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 SiO₂ Na Sr Tl Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>pbearney</i>	<i>arsh</i>	9-1-23 8:12			



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5190-1
SDG Number: 03C1558268

Login Number: 5190
List Number: 1
Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5190-1
SDG Number: 03C1558268

Login Number: 5190
List Number: 2
Creator: Rodriguez, Leticia

List Source: Eurofins Midland
List Creation: 09/05/23 08:34 AM

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

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 10/6/2023 2:44:29 PM

JOB DESCRIPTION

Poker Lake Unit 301H
 SDG NUMBER 03C1558268

JOB NUMBER

890-5341-1



Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
10/6/2023 2:44:29 PM

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

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Client: Ensolum
Project/Site: Poker Lake Unit 301H

Laboratory Job ID: 890-5341-1
SDG: 03C1558268

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Qualifiers

GC VOA

Qualifier	Qualifier Description
*-	LCS and/or LCSD is outside acceptance limits, low biased.
*1	LCS/LCSD RPD exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD 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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Job ID: 890-5341-1

Laboratory: Eurofins Carlsbad**Narrative****Job Narrative
890-5341-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 9/26/2023 11:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 16.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02A (890-5341-1) and PH03A (890-5341-2).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH02A (890-5341-1) and (890-5376-A-21-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-63761 and analytical batch 880-63990 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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) precision for preparation batch 880-63537 and analytical batch 880-63579 was outside control limits. Sample non-homogeneity is suspected.

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

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: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Client Sample ID: PH02A

Lab Sample ID: 890-5341-1

Date Collected: 09/25/23 09:50

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 6'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		10/02/23 13:35	10/05/23 18:03	1
Toluene	<0.00200	U *-*1	0.00200	mg/Kg		10/02/23 13:35	10/05/23 18:03	1
Ethylbenzene	<0.00200	U *-*1	0.00200	mg/Kg		10/02/23 13:35	10/05/23 18:03	1
m-Xylene & p-Xylene	<0.00401	U *-*1	0.00401	mg/Kg		10/02/23 13:35	10/05/23 18:03	1
o-Xylene	<0.00200	U *-*1	0.00200	mg/Kg		10/02/23 13:35	10/05/23 18:03	1
Xylenes, Total	<0.00401	U *-*1	0.00401	mg/Kg		10/02/23 13:35	10/05/23 18:03	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	10/02/23 13:35	10/05/23 18:03	1
1,4-Difluorobenzene (Surr)	67	S1-	70 - 130	10/02/23 13:35	10/05/23 18:03	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/05/23 18:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			09/29/23 10:55	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	50.1	mg/Kg		09/28/23 13:58	09/29/23 10:55	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1	mg/Kg		09/28/23 13:58	09/29/23 10:55	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		09/28/23 13:58	09/29/23 10:55	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130	09/28/23 13:58	09/29/23 10:55	1
o-Terphenyl	94		70 - 130	09/28/23 13:58	09/29/23 10:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	277		4.98	mg/Kg			09/29/23 15:52	1

Client Sample ID: PH03A

Lab Sample ID: 890-5341-2

Date Collected: 09/25/23 12:05

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 6'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:23	1
Toluene	<0.00199	U *-*1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:23	1
Ethylbenzene	<0.00199	U *-*1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:23	1
m-Xylene & p-Xylene	<0.00398	U *-*1	0.00398	mg/Kg		10/02/23 13:35	10/05/23 18:23	1
o-Xylene	<0.00199	U *-*1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:23	1
Xylenes, Total	<0.00398	U *-*1	0.00398	mg/Kg		10/02/23 13:35	10/05/23 18:23	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	10/02/23 13:35	10/05/23 18:23	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
 SDG: 03C1558268

Client Sample ID: PH03A

Lab Sample ID: 890-5341-2

Date Collected: 09/25/23 12:05

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 6'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	70		70 - 130	10/02/23 13:35	10/05/23 18:23	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/05/23 18:23	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/29/23 12:02	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 12:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 12:02	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 12:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/28/23 13:58	09/29/23 12:02	1
o-Terphenyl	98		70 - 130	09/28/23 13:58	09/29/23 12:02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1480		25.1	mg/Kg			09/29/23 16:10	5

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-5341-1	PH02A	95	67 S1-
890-5341-2	PH03A	90	70
890-5376-A-21-D MS	Matrix Spike	106	118
890-5376-A-21-E MSD	Matrix Spike Duplicate	115	120
LCS 880-63761/1-A	Lab Control Sample	111	116
LCSD 880-63761/2-A	Lab Control Sample Dup	85	108
MB 880-63761/5-A	Method Blank	71	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
890-5341-1	PH02A	89	94
890-5341-1 MS	PH02A	93	89
890-5341-1 MSD	PH02A	109	103
890-5341-2	PH03A	97	98
LCS 880-63537/2-A	Lab Control Sample	111	124
LCSD 880-63537/3-A	Lab Control Sample Dup	83	94
MB 880-63537/1-A	Method Blank	77	87

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63761/5-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63761

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/02/23 13:35	10/05/23 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130	10/02/23 13:35	10/05/23 11:42	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/02/23 13:35	10/05/23 11:42	1

Lab Sample ID: LCS 880-63761/1-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1055		mg/Kg		105	70 - 130
Toluene	0.100	0.1112		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2374		mg/Kg		119	70 - 130
o-Xylene	0.100	0.1156		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: LCSD 880-63761/2-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.07265	*1	mg/Kg		73	70 - 130	37	35
Toluene	0.100	0.06385	*- *1	mg/Kg		64	70 - 130	54	35
Ethylbenzene	0.100	0.05811	*- *1	mg/Kg		58	70 - 130	65	35
m-Xylene & p-Xylene	0.200	0.1107	*- *1	mg/Kg		55	70 - 130	73	35
o-Xylene	0.100	0.05425	*- *1	mg/Kg		54	70 - 130	72	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-5376-A-21-D MS
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *1	0.0998	0.1127		mg/Kg		113	70 - 130
Toluene	<0.00200	U *- *1	0.0998	0.1083		mg/Kg		109	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

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

Lab Sample ID: 890-5376-A-21-D MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63990

Prep Batch: 63761

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U *- *1	0.0998	0.1087		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00401	U *- *1	0.200	0.2225		mg/Kg		111	70 - 130
o-Xylene	<0.00200	U *- *1	0.0998	0.1091		mg/Kg		109	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-5376-A-21-E MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63990

Prep Batch: 63761

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00200	U *1	0.0990	0.1177		mg/Kg		119	70 - 130	4	35
Toluene	<0.00200	U *- *1	0.0990	0.1130		mg/Kg		114	70 - 130	4	35
Ethylbenzene	<0.00200	U *- *1	0.0990	0.1125		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U *- *1	0.198	0.2293		mg/Kg		116	70 - 130	3	35
o-Xylene	<0.00200	U *- *1	0.0990	0.1126		mg/Kg		114	70 - 130	3	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

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

Lab Sample ID: MB 880-63537/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63579

Prep Batch: 63537

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	77		70 - 130	09/28/23 13:58	09/29/23 08:01	1
o-Terphenyl	87		70 - 130	09/28/23 13:58	09/29/23 08:01	1

Lab Sample ID: LCS 880-63537/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63579

Prep Batch: 63537

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	965.2		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.3		mg/Kg		92	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-63537/2-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63537

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	111		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-63537/3-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	949.0		mg/Kg		95	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)	1000	845.0		mg/Kg		84	70 - 130	9	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	83		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-5341-1 MS
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: PH02A
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	1177		mg/Kg		115	70 - 130			
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	891.6		mg/Kg		84	70 - 130			

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-5341-1 MSD
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: PH02A
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	912.0	F2	mg/Kg		89	70 - 130	25	20	
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	1040		mg/Kg		99	70 - 130	15	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	109		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63433/1-A
Matrix: Solid
Analysis Batch: 63639

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			09/29/23 15:35	1

Lab Sample ID: LCS 880-63433/2-A
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.9		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-63433/3-A
Matrix: Solid
Analysis Batch: 63639

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	238.6		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-5341-1 MS
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: PH02A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	277		249	500.4		mg/Kg		90	90 - 110

Lab Sample ID: 890-5341-1 MSD
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: PH02A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	277		249	500.9		mg/Kg		90	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

GC VOA

Prep Batch: 63761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	5035	
890-5341-2	PH03A	Total/NA	Solid	5035	
MB 880-63761/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63761/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63761/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5376-A-21-D MS	Matrix Spike	Total/NA	Solid	5035	
890-5376-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 63990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	8021B	63761
890-5341-2	PH03A	Total/NA	Solid	8021B	63761
MB 880-63761/5-A	Method Blank	Total/NA	Solid	8021B	63761
LCS 880-63761/1-A	Lab Control Sample	Total/NA	Solid	8021B	63761
LCSD 880-63761/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63761
890-5376-A-21-D MS	Matrix Spike	Total/NA	Solid	8021B	63761
890-5376-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63761

Analysis Batch: 64118

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	Total BTEX	
890-5341-2	PH03A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	8015NM Prep	
890-5341-2	PH03A	Total/NA	Solid	8015NM Prep	
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5341-1 MS	PH02A	Total/NA	Solid	8015NM Prep	
890-5341-1 MSD	PH02A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	8015B NM	63537
890-5341-2	PH03A	Total/NA	Solid	8015B NM	63537
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015B NM	63537
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63537
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63537
890-5341-1 MS	PH02A	Total/NA	Solid	8015B NM	63537
890-5341-1 MSD	PH02A	Total/NA	Solid	8015B NM	63537

Analysis Batch: 63765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Total/NA	Solid	8015 NM	
890-5341-2	PH03A	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
 SDG: 03C1558268

HPLC/IC

Leach Batch: 63433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Soluble	Solid	DI Leach	
890-5341-2	PH03A	Soluble	Solid	DI Leach	
MB 880-63433/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63433/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63433/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5341-1 MS	PH02A	Soluble	Solid	DI Leach	
890-5341-1 MSD	PH02A	Soluble	Solid	DI Leach	

Analysis Batch: 63639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5341-1	PH02A	Soluble	Solid	300.0	63433
890-5341-2	PH03A	Soluble	Solid	300.0	63433
MB 880-63433/1-A	Method Blank	Soluble	Solid	300.0	63433
LCS 880-63433/2-A	Lab Control Sample	Soluble	Solid	300.0	63433
LCSD 880-63433/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63433
890-5341-1 MS	PH02A	Soluble	Solid	300.0	63433
890-5341-1 MSD	PH02A	Soluble	Solid	300.0	63433

Lab Chronicle

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
 SDG: 03C1558268

Client Sample ID: PH02A

Lab Sample ID: 890-5341-1

Date Collected: 09/25/23 09:50

Matrix: Solid

Date Received: 09/26/23 11:50

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	63761	10/02/23 13:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63990	10/05/23 18:03	SM	EET MID
Total/NA	Analysis	Total BTEX		1			64118	10/05/23 18:03	SM	EET MID
Total/NA	Analysis	8015 NM		1			63765	09/29/23 10:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 10:55	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	63433	09/27/23 12:13	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63639	09/29/23 15:52	CH	EET MID

Client Sample ID: PH03A

Lab Sample ID: 890-5341-2

Date Collected: 09/25/23 12:05

Matrix: Solid

Date Received: 09/26/23 11:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63761	10/02/23 13:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63990	10/05/23 18:23	SM	EET MID
Total/NA	Analysis	Total BTEX		1			64118	10/05/23 18:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			63765	09/29/23 12:02	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 12:02	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63433	09/27/23 12:13	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63639	09/29/23 16:10	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

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	T104704400-23-26	06-30-24

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

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

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

Method Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5341-1
SDG: 03C1558268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5341-1	PH02A	Solid	09/25/23 09:50	09/26/23 11:50	6'
890-5341-2	PH03A	Solid	09/25/23 12:05	09/26/23 11:50	6'

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

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

Environment Testing
Xenco



Work Order No: _____

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Project Manager: Ben Bejill	Bill to: (if different)	Garrett Green
Company Name: ENOBIUM, LLC	Company Name:	XTO Energy
Address: 3122 National Parks Hwy	Address:	3104 E. Greene St
City, State ZIP: Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone: 989-854-0862	Email: Garrett.Green@ExxonMobil.com	

Project Name: Doker Lake Unit 301H	Turn Around										
Project Number: 0361558208	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush										
Project Location: 32.18430, -103.87522	Due Date: 5 days										
Sampler's Name: Mahana O'Dell	TAT starts the day received by the lab, if received by 4:30pm										
<table border="1"> <tr> <td>Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></td> <td>Wetice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> <td>Parameters</td> </tr> <tr> <td>Thermometer ID: N/A</td> <td>Correction Factor: N/A</td> <td></td> </tr> <tr> <td>Temperature Reading: N/A</td> <td>Corrected Temperature: 16.8</td> <td></td> </tr> </table>			Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Parameters	Thermometer ID: N/A	Correction Factor: N/A		Temperature Reading: N/A	Corrected Temperature: 16.8	
Blank: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Wetice: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Parameters									
Thermometer ID: N/A	Correction Factor: N/A										
Temperature Reading: N/A	Corrected Temperature: 16.8										

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Pres Code
PH02A	S	9/25/23	9:50	10'	G	1	
PH02A	S	9/25/23	12:05	10'	G	1	
<p>890-5341 Chain of Custody</p> <p>890-5341 Chain of Custody</p>							
<p>Chickies TPH BTEX</p>							
<p>Incident #: NAPP2322040789</p> <p>COST center: 113881001</p> <p>API: 30-015-30924</p> <p>Ben Bejill ben.bejill@xencosol.com</p>							

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be Cd Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>M. Carney</i>	<i>B. Bejill</i>	9/26 11:50			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5341-1

SDG Number: 03C1558268

Login Number: 5341

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5341-1

SDG Number: 03C1558268

Login Number: 5341

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 09/27/23 10:53 AM

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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
Ensolum
601 N. Marienfeld St.
Suite 400
Midland, Texas 79701
Generated 10/6/2023 2:44:32 PM

JOB DESCRIPTION

Poker Lake Unit 301H
SDG NUMBER 03C1558268

JOB NUMBER

890-5347-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220



Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



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

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Client: Ensolum
Project/Site: Poker Lake Unit 301H

Laboratory Job ID: 890-5347-1
SDG: 03C1558268

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Job ID: 890-5347-1

Laboratory: Eurofins Carlsbad**Narrative****Job Narrative
890-5347-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 9/26/2023 11:50 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 16.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-5347-1) and PH03 (890-5347-2).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: PH02 (890-5347-1), PH03 (890-5347-2) and (890-5376-A-21-F). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-63761 and analytical batch 880-63990 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-33751-A-21-E MS) and (880-33751-A-21-F MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH02 (890-5347-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63538 and analytical batch 880-63575 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

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: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Client Sample ID: PH02

Lab Sample ID: 890-5347-1

Date Collected: 09/25/23 09:15

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:44	1
Toluene	<0.00199	U *- *1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:44	1
Ethylbenzene	<0.00199	U *- *1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:44	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		10/02/23 13:35	10/05/23 18:44	1
o-Xylene	<0.00199	U *- *1	0.00199	mg/Kg		10/02/23 13:35	10/05/23 18:44	1
Xylenes, Total	<0.00398	U *- *1	0.00398	mg/Kg		10/02/23 13:35	10/05/23 18:44	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	10/02/23 13:35	10/05/23 18:44	1
1,4-Difluorobenzene (Surr)	66	S1-	70 - 130	10/02/23 13:35	10/05/23 18:44	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/05/23 18:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			09/29/23 14:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		09/28/23 14:02	09/29/23 14:50	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		09/28/23 14:02	09/29/23 14:50	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		09/28/23 14:02	09/29/23 14:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	66	S1-	70 - 130	09/28/23 14:02	09/29/23 14:50	1
o-Terphenyl	74		70 - 130	09/28/23 14:02	09/29/23 14:50	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1100		25.3	mg/Kg			09/29/23 16:16	5

Client Sample ID: PH03

Lab Sample ID: 890-5347-2

Date Collected: 09/25/23 10:30

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U *1	0.00198	mg/Kg		10/02/23 13:35	10/05/23 19:04	1
Toluene	0.00244	*- *1	0.00198	mg/Kg		10/02/23 13:35	10/05/23 19:04	1
Ethylbenzene	0.00761	*- *1	0.00198	mg/Kg		10/02/23 13:35	10/05/23 19:04	1
m-Xylene & p-Xylene	0.0107	*- *1	0.00396	mg/Kg		10/02/23 13:35	10/05/23 19:04	1
o-Xylene	0.0274	*- *1	0.00198	mg/Kg		10/02/23 13:35	10/05/23 19:04	1
Xylenes, Total	0.0381	*- *1	0.00396	mg/Kg		10/02/23 13:35	10/05/23 19:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130	10/02/23 13:35	10/05/23 19:04	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
 SDG: 03C1558268

Client Sample ID: PH03

Lab Sample ID: 890-5347-2

Date Collected: 09/25/23 10:30

Matrix: Solid

Date Received: 09/26/23 11:50

Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	10/02/23 13:35	10/05/23 19:04	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.0482		0.00396	mg/Kg			10/05/23 19:04	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	300		50.3	mg/Kg			09/29/23 15:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		09/28/23 14:02	09/29/23 15:38	1
Diesel Range Organics (Over C10-C28)	300		50.3	mg/Kg		09/28/23 14:02	09/29/23 15:38	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		09/28/23 14:02	09/29/23 15:38	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	75		70 - 130	09/28/23 14:02	09/29/23 15:38	1		
o-Terphenyl	81		70 - 130	09/28/23 14:02	09/29/23 15:38	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5610		50.4	mg/Kg			09/29/23 16:22	10

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-5347-1	PH02	89	66 S1-
890-5347-2	PH03	140 S1+	100
890-5376-A-21-D MS	Matrix Spike	106	118
890-5376-A-21-E MSD	Matrix Spike Duplicate	115	120
LCS 880-63761/1-A	Lab Control Sample	111	116
LCSD 880-63761/2-A	Lab Control Sample Dup	85	108
MB 880-63761/5-A	Method Blank	71	93

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-33751-A-21-E MS	Matrix Spike	64 S1-	60 S1-
880-33751-A-21-F MSD	Matrix Spike Duplicate	64 S1-	60 S1-
890-5347-1	PH02	66 S1-	74
890-5347-2	PH03	75	81
LCS 880-63538/2-A	Lab Control Sample	104	112
LCSD 880-63538/3-A	Lab Control Sample Dup	96	102
MB 880-63538/1-A	Method Blank	97	118

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63761/5-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63761

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 13:35	10/05/23 11:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/02/23 13:35	10/05/23 11:42	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	71		70 - 130	10/02/23 13:35	10/05/23 11:42	1
1,4-Difluorobenzene (Surr)	93		70 - 130	10/02/23 13:35	10/05/23 11:42	1

Lab Sample ID: LCS 880-63761/1-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1055		mg/Kg		105	70 - 130
Toluene	0.100	0.1112		mg/Kg		111	70 - 130
Ethylbenzene	0.100	0.1144		mg/Kg		114	70 - 130
m-Xylene & p-Xylene	0.200	0.2374		mg/Kg		119	70 - 130
o-Xylene	0.100	0.1156		mg/Kg		116	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: LCSD 880-63761/2-A
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.07265	*1	mg/Kg		73	70 - 130	37	35
Toluene	0.100	0.06385	*- *1	mg/Kg		64	70 - 130	54	35
Ethylbenzene	0.100	0.05811	*- *1	mg/Kg		58	70 - 130	65	35
m-Xylene & p-Xylene	0.200	0.1107	*- *1	mg/Kg		55	70 - 130	73	35
o-Xylene	0.100	0.05425	*- *1	mg/Kg		54	70 - 130	72	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-5376-A-21-D MS
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U *1	0.0998	0.1127		mg/Kg		113	70 - 130
Toluene	<0.00200	U *- *1	0.0998	0.1083		mg/Kg		109	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

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

Lab Sample ID: 890-5376-A-21-D MS
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00200	U *- *1	0.0998	0.1087		mg/Kg		109	70 - 130
m-Xylene & p-Xylene	<0.00401	U *- *1	0.200	0.2225		mg/Kg		111	70 - 130
o-Xylene	<0.00200	U *- *1	0.0998	0.1091		mg/Kg		109	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	106		70 - 130
1,4-Difluorobenzene (Surr)	118		70 - 130

Lab Sample ID: 890-5376-A-21-E MSD
Matrix: Solid
Analysis Batch: 63990

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63761

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00200	U *1	0.0990	0.1177		mg/Kg		119	70 - 130	4	35
Toluene	<0.00200	U *- *1	0.0990	0.1130		mg/Kg		114	70 - 130	4	35
Ethylbenzene	<0.00200	U *- *1	0.0990	0.1125		mg/Kg		114	70 - 130	3	35
m-Xylene & p-Xylene	<0.00401	U *- *1	0.198	0.2293		mg/Kg		116	70 - 130	3	35
o-Xylene	<0.00200	U *- *1	0.0990	0.1126		mg/Kg		114	70 - 130	3	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	120		70 - 130

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

Lab Sample ID: MB 880-63538/1-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63538

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/28/23 14:02	09/29/23 07:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/28/23 14:02	09/29/23 07:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/28/23 14:02	09/29/23 07:54	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	97		70 - 130	09/28/23 14:02	09/29/23 07:54	1
o-Terphenyl	118		70 - 130	09/28/23 14:02	09/29/23 07:54	1

Lab Sample ID: LCS 880-63538/2-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	1130		mg/Kg		113	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1110		mg/Kg		111	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-63538/2-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63538

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	104		70 - 130
o-Terphenyl	112		70 - 130

Lab Sample ID: LCSD 880-63538/3-A
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Spike Added	LCSD LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	953.1		mg/Kg		95	70 - 130	17		20
Diesel Range Organics (Over C10-C28)	1000	1082		mg/Kg		108	70 - 130	3		20

Surrogate	LCSD LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	96		70 - 130
o-Terphenyl	102		70 - 130

Lab Sample ID: 880-33751-A-21-E MS
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F1	1010	641.7	F1	mg/Kg		62	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	603.8	F1	mg/Kg		56	70 - 130	

Surrogate	MS MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

Lab Sample ID: 880-33751-A-21-F MSD
Matrix: Solid
Analysis Batch: 63575

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63538

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U F1	1010	630.6	F1	mg/Kg		60	70 - 130	2		20
Diesel Range Organics (Over C10-C28)	<49.6	U F1	1010	610.1	F1	mg/Kg		57	70 - 130	1		20

Surrogate	MSD MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	64	S1-	70 - 130
o-Terphenyl	60	S1-	70 - 130

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63433/1-A
Matrix: Solid
Analysis Batch: 63639

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			09/29/23 15:35	1

Lab Sample ID: LCS 880-63433/2-A
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	238.9		mg/Kg		96	90 - 110

Lab Sample ID: LCSD 880-63433/3-A
Matrix: Solid
Analysis Batch: 63639

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	238.6		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-5341-A-1-C MS
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	277		249	500.4		mg/Kg		90	90 - 110

Lab Sample ID: 890-5341-A-1-D MSD
Matrix: Solid
Analysis Batch: 63639

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	277		249	500.9		mg/Kg		90	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

GC VOA

Prep Batch: 63761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	5035	
890-5347-2	PH03	Total/NA	Solid	5035	
MB 880-63761/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63761/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63761/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5376-A-21-D MS	Matrix Spike	Total/NA	Solid	5035	
890-5376-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 63990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	8021B	63761
890-5347-2	PH03	Total/NA	Solid	8021B	63761
MB 880-63761/5-A	Method Blank	Total/NA	Solid	8021B	63761
LCS 880-63761/1-A	Lab Control Sample	Total/NA	Solid	8021B	63761
LCSD 880-63761/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63761
890-5376-A-21-D MS	Matrix Spike	Total/NA	Solid	8021B	63761
890-5376-A-21-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63761

Analysis Batch: 64119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	Total BTEX	
890-5347-2	PH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63538

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	8015NM Prep	
890-5347-2	PH03	Total/NA	Solid	8015NM Prep	
MB 880-63538/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63538/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63538/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-33751-A-21-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-33751-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 63575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	8015B NM	63538
890-5347-2	PH03	Total/NA	Solid	8015B NM	63538
MB 880-63538/1-A	Method Blank	Total/NA	Solid	8015B NM	63538
LCS 880-63538/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63538
LCSD 880-63538/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63538
880-33751-A-21-E MS	Matrix Spike	Total/NA	Solid	8015B NM	63538
880-33751-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63538

Analysis Batch: 63737

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Total/NA	Solid	8015 NM	
890-5347-2	PH03	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
 SDG: 03C1558268

HPLC/IC

Leach Batch: 63433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Soluble	Solid	DI Leach	
890-5347-2	PH03	Soluble	Solid	DI Leach	
MB 880-63433/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63433/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63433/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5341-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5341-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 63639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5347-1	PH02	Soluble	Solid	300.0	63433
890-5347-2	PH03	Soluble	Solid	300.0	63433
MB 880-63433/1-A	Method Blank	Soluble	Solid	300.0	63433
LCS 880-63433/2-A	Lab Control Sample	Soluble	Solid	300.0	63433
LCSD 880-63433/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63433
890-5341-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	63433
890-5341-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63433

Lab Chronicle

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
 SDG: 03C1558268

Client Sample ID: PH02

Lab Sample ID: 890-5347-1

Date Collected: 09/25/23 09:15

Matrix: Solid

Date Received: 09/26/23 11:50

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	63761	10/02/23 13:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63990	10/05/23 18:44	SM	EET MID
Total/NA	Analysis	Total BTEX		1			64119	10/05/23 18:44	SM	EET MID
Total/NA	Analysis	8015 NM		1			63737	09/29/23 14:50	SM	EET MID
Total/NA	Prep	8015NM Prep			10.06 g	10 mL	63538	09/28/23 14:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63575	09/29/23 14:50	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	63433	09/27/23 12:13	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	63639	09/29/23 16:16	CH	EET MID

Client Sample ID: PH03

Lab Sample ID: 890-5347-2

Date Collected: 09/25/23 10:30

Matrix: Solid

Date Received: 09/26/23 11:50

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63761	10/02/23 13:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63990	10/05/23 19:04	SM	EET MID
Total/NA	Analysis	Total BTEX		1			64119	10/05/23 19:04	SM	EET MID
Total/NA	Analysis	8015 NM		1			63737	09/29/23 15:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	63538	09/28/23 14:02	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63575	09/29/23 15:38	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63433	09/27/23 12:13	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63639	09/29/23 16:22	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

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	T104704400-23-26	06-30-24

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

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

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- 13
- 14

Method Summary

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
 SDG: 03C1558268

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5347-1
SDG: 03C1558268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5347-1	PH02	Solid	09/25/23 09:15	09/26/23 11:50	4'
890-5347-2	PH03	Solid	09/25/23 10:30	09/26/23 11:50	4'

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5347-1

SDG Number: 03C1558268

Login Number: 5347

List Number: 1

Creator: Bruns, Shannon

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5347-1

SDG Number: 03C1558268

Login Number: 5347

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 09/27/23 10:53 AM

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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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 10/5/2023 1:38:55 PM

JOB DESCRIPTION

Poker Lake Unit 301H
 SDG NUMBER 03C1558268

JOB NUMBER

890-5353-1

Eurofins Carlsbad
 1089 N Canal St.
 Carlsbad NM 88220



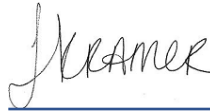
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
10/5/2023 1:38:55 PM

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

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Client: Ensolum
Project/Site: Poker Lake Unit 301H

Laboratory Job ID: 890-5353-1
SDG: 03C1558268

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
*	LCS and/or LCSD is outside acceptance limits, low biased.
U	Indicates the analyte was analyzed for but not detected.

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Job ID: 890-5353-1

Laboratory: Eurofins Carlsbad**Narrative****Job Narrative
890-5353-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 9/26/2023 4:20 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.0°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01 (890-5353-1), FS02 (890-5353-2), FS03 (890-5353-3), FS04 (890-5353-4), SW01 (890-5353-5) and SW02 (890-5353-6).

GC VOA

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-63922 recovered above the upper control limit for Benzene, Toluene, m-Xylene & p-Xylene and o-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63923 and analytical batch 880-63922 was outside the upper control limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS03 (890-5353-3), FS04 (890-5353-4) and SW02 (890-5353-6). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-63537 and analytical batch 880-63579 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

Method 300_ORGFM_28D: The laboratory control sample (LCS) associated with preparation batch 880-63490 and analytical batch 880-63636 was outside acceptance criteria. Re-extraction and/or re-analysis was not performed. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Client Sample ID: FS01

Lab Sample ID: 890-5353-1

Date Collected: 09/26/23 12:50

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 18:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 18:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	10/04/23 08:42	10/04/23 18:08	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/04/23 08:42	10/04/23 18:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/04/23 18:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	144		49.6	mg/Kg			09/29/23 17:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		09/28/23 13:58	09/29/23 17:10	1
Diesel Range Organics (Over C10-C28)	144		49.6	mg/Kg		09/28/23 13:58	09/29/23 17:10	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		09/28/23 13:58	09/29/23 17:10	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130	09/28/23 13:58	09/29/23 17:10	1
o-Terphenyl	107		70 - 130	09/28/23 13:58	09/29/23 17:10	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	871	*-	5.05	mg/Kg			09/29/23 15:59	1

Client Sample ID: FS02

Lab Sample ID: 890-5353-2

Date Collected: 09/26/23 12:45

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/04/23 08:42	10/04/23 18:29	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/04/23 08:42	10/04/23 18:29	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/04/23 08:42	10/04/23 18:29	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/04/23 08:42	10/04/23 18:29	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/04/23 08:42	10/04/23 18:29	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/04/23 08:42	10/04/23 18:29	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	10/04/23 08:42	10/04/23 18:29	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Client Sample ID: FS02

Lab Sample ID: 890-5353-2

Date Collected: 09/26/23 12:45

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107		70 - 130	10/04/23 08:42	10/04/23 18:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/04/23 18:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	169		50.4	mg/Kg			09/29/23 17:33	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4	mg/Kg		09/28/23 13:58	09/29/23 17:33	1
Diesel Range Organics (Over C10-C28)	169		50.4	mg/Kg		09/28/23 13:58	09/29/23 17:33	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4	mg/Kg		09/28/23 13:58	09/29/23 17:33	1
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
1-Chlorooctane	95		70 - 130	09/28/23 13:58	09/29/23 17:33	1		
o-Terphenyl	97		70 - 130	09/28/23 13:58	09/29/23 17:33	1		

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	942	*-	5.03	mg/Kg			09/29/23 16:19	1

Client Sample ID: FS03

Lab Sample ID: 890-5353-3

Date Collected: 09/26/23 12:55

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 18:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 18:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 18:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/04/23 08:42	10/04/23 18:49	1
1,4-Difluorobenzene (Surr)	107		70 - 130	10/04/23 08:42	10/04/23 18:49	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/04/23 18:49	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	93.0		50.1	mg/Kg			09/29/23 17:55	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Client Sample ID: FS03

Lab Sample ID: 890-5353-3

Date Collected: 09/26/23 12:55

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		09/28/23 13:58	09/29/23 17:55	1
Diesel Range Organics (Over C10-C28)	93.0		50.1	mg/Kg		09/28/23 13:58	09/29/23 17:55	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		09/28/23 13:58	09/29/23 17:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	69	S1-	70 - 130			09/28/23 13:58	09/29/23 17:55	1
o-Terphenyl	68	S1-	70 - 130			09/28/23 13:58	09/29/23 17:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	211	*-	5.00	mg/Kg			09/29/23 16:25	1

Client Sample ID: FS04

Lab Sample ID: 890-5353-4

Date Collected: 09/26/23 13:00

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/04/23 08:42	10/04/23 19:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			10/04/23 08:42	10/04/23 19:10	1
1,4-Difluorobenzene (Surr)	108		70 - 130			10/04/23 08:42	10/04/23 19:10	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/04/23 19:10	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			09/29/23 18:17	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		09/28/23 13:58	09/29/23 18:17	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		09/28/23 13:58	09/29/23 18:17	1
Oil Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		09/28/23 13:58	09/29/23 18:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	62	S1-	70 - 130			09/28/23 13:58	09/29/23 18:17	1
o-Terphenyl	62	S1-	70 - 130			09/28/23 13:58	09/29/23 18:17	1

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Client Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
 SDG: 03C1558268

Client Sample ID: FS04

Lab Sample ID: 890-5353-4

Date Collected: 09/26/23 13:00
 Date Received: 09/26/23 16:20
 Sample Depth: 1

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	171	*-	4.97	mg/Kg			09/29/23 16:32	1

Client Sample ID: SW01

Lab Sample ID: 890-5353-5

Date Collected: 09/26/23 13:30
 Date Received: 09/26/23 16:20
 Sample Depth: 0-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/04/23 08:42	10/04/23 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			10/04/23 08:42	10/04/23 19:30	1
1,4-Difluorobenzene (Surr)	103		70 - 130			10/04/23 08:42	10/04/23 19:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/04/23 19:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/29/23 18:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 18:39	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 18:39	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/28/23 13:58	09/29/23 18:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	78		70 - 130			09/28/23 13:58	09/29/23 18:39	1
o-Terphenyl	77		70 - 130			09/28/23 13:58	09/29/23 18:39	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	111	*-	4.95	mg/Kg			09/29/23 16:38	1

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Client Sample ID: SW02

Lab Sample ID: 890-5353-6

Date Collected: 09/26/23 14:10

Matrix: Solid

Date Received: 09/26/23 16:20

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 19:50	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 19:50	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 19:50	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 19:50	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/04/23 08:42	10/04/23 19:50	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/04/23 08:42	10/04/23 19:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	10/04/23 08:42	10/04/23 19:50	1
1,4-Difluorobenzene (Surr)	109		70 - 130	10/04/23 08:42	10/04/23 19:50	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/04/23 19:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			09/29/23 19:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		09/28/23 13:58	09/29/23 19:01	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3	mg/Kg		09/28/23 13:58	09/29/23 19:01	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		09/28/23 13:58	09/29/23 19:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	66	S1-	70 - 130	09/28/23 13:58	09/29/23 19:01	1
o-Terphenyl	63	S1-	70 - 130	09/28/23 13:58	09/29/23 19:01	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122	*-	5.04	mg/Kg			09/29/23 16:45	1

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		BFB1 (70-130)	DFBZ1 (70-130)
880-33935-A-2-D MS	Matrix Spike	96	107
880-33935-A-2-E MSD	Matrix Spike Duplicate	107	101
890-5353-1	FS01	101	107
890-5353-2	FS02	104	107
890-5353-3	FS03	98	107
890-5353-4	FS04	110	108
890-5353-5	SW01	96	103
890-5353-6	SW02	107	109
LCS 880-63923/1-A	Lab Control Sample	108	106
LCSD 880-63923/2-A	Lab Control Sample Dup	90	95
MB 880-63923/5-A	Method Blank	104	134 S1+

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		1CO1 (70-130)	OTPH1 (70-130)
890-5341-A-1-F MS	Matrix Spike	93	89
890-5341-A-1-G MSD	Matrix Spike Duplicate	109	103
890-5353-1	FS01	103	107
890-5353-2	FS02	95	97
890-5353-3	FS03	69 S1-	68 S1-
890-5353-4	FS04	62 S1-	62 S1-
890-5353-5	SW01	78	77
890-5353-6	SW02	66 S1-	63 S1-
LCS 880-63537/2-A	Lab Control Sample	111	124
LCSD 880-63537/3-A	Lab Control Sample Dup	83	94
MB 880-63537/1-A	Method Blank	77	87

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
 SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63923/5-A
 Matrix: Solid
 Analysis Batch: 63922

Client Sample ID: Method Blank
 Prep Type: Total/NA
 Prep Batch: 63923

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 11:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/23 08:42	10/04/23 11:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/23 08:42	10/04/23 11:43	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/23 08:42	10/04/23 11:43	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	10/04/23 08:42	10/04/23 11:43	1
1,4-Difluorobenzene (Surr)	134	S1+	70 - 130	10/04/23 08:42	10/04/23 11:43	1

Lab Sample ID: LCS 880-63923/1-A
 Matrix: Solid
 Analysis Batch: 63922

Client Sample ID: Lab Control Sample
 Prep Type: Total/NA
 Prep Batch: 63923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.09581		mg/Kg		96	70 - 130
Toluene	0.100	0.08367		mg/Kg		84	70 - 130
Ethylbenzene	0.100	0.08551		mg/Kg		86	70 - 130
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130
o-Xylene	0.100	0.09326		mg/Kg		93	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: LCSD 880-63923/2-A
 Matrix: Solid
 Analysis Batch: 63922

Client Sample ID: Lab Control Sample Dup
 Prep Type: Total/NA
 Prep Batch: 63923

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1064		mg/Kg		106	70 - 130	10	35
Toluene	0.100	0.09190		mg/Kg		92	70 - 130	9	35
Ethylbenzene	0.100	0.07947		mg/Kg		79	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.1743		mg/Kg		87	70 - 130	10	35
o-Xylene	0.100	0.09054		mg/Kg		91	70 - 130	3	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 880-33935-A-2-D MS
 Matrix: Solid
 Analysis Batch: 63922

Client Sample ID: Matrix Spike
 Prep Type: Total/NA
 Prep Batch: 63923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.1152		mg/Kg		115	70 - 130
Toluene	<0.00198	U	0.0998	0.09615		mg/Kg		96	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

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

Lab Sample ID: 880-33935-A-2-D MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63922

Prep Batch: 63923

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00198	U	0.0998	0.09123		mg/Kg		91	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1970		mg/Kg		99	70 - 130
o-Xylene	<0.00198	U	0.0998	0.09331		mg/Kg		93	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-33935-A-2-E MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63922

Prep Batch: 63923

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00198	U	0.100	0.08375		mg/Kg		84	70 - 130	32	35
Toluene	<0.00198	U	0.100	0.07419		mg/Kg		74	70 - 130	26	35
Ethylbenzene	<0.00198	U	0.100	0.07248		mg/Kg		72	70 - 130	23	35
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1627		mg/Kg		81	70 - 130	19	35
o-Xylene	<0.00198	U	0.100	0.08011		mg/Kg		79	70 - 130	15	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	107		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

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

Lab Sample ID: MB 880-63537/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63579

Prep Batch: 63537

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/28/23 13:58	09/29/23 08:01	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	77		70 - 130	09/28/23 13:58	09/29/23 08:01	1
o-Terphenyl	87		70 - 130	09/28/23 13:58	09/29/23 08:01	1

Lab Sample ID: LCS 880-63537/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 63579

Prep Batch: 63537

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	965.2		mg/Kg		97	70 - 130
Diesel Range Organics (Over C10-C28)	1000	921.3		mg/Kg		92	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-63537/2-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63537

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	111		70 - 130
o-Terphenyl	124		70 - 130

Lab Sample ID: LCSD 880-63537/3-A
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Spike Added	LCSD		Unit	D	%Rec	%Rec		RPD	Limit
		Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	949.0		mg/Kg		95	70 - 130	2	20	
Diesel Range Organics (Over C10-C28)	1000	845.0		mg/Kg		84	70 - 130	9	20	

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	83		70 - 130
o-Terphenyl	94		70 - 130

Lab Sample ID: 890-5341-A-1-F MS
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec	
				Result	Qualifier				Limits	RPD
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	1177		mg/Kg		115	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	891.6		mg/Kg		84	70 - 130	

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	93		70 - 130
o-Terphenyl	89		70 - 130

Lab Sample ID: 890-5341-A-1-G MSD
Matrix: Solid
Analysis Batch: 63579

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63537

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec		RPD	Limit
				Result	Qualifier				Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F2	1010	912.0	F2	mg/Kg		89	70 - 130	25	20	
Diesel Range Organics (Over C10-C28)	<50.1	U	1010	1040		mg/Kg		99	70 - 130	15	20	

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	109		70 - 130
o-Terphenyl	103		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63490/1-A
Matrix: Solid
Analysis Batch: 63636

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			09/29/23 13:34	1

Lab Sample ID: LCS 880-63490/2-A
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	213.5	*-	mg/Kg		85	90 - 110

Lab Sample ID: LCSD 880-63490/3-A
Matrix: Solid
Analysis Batch: 63636

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	229.4		mg/Kg		92	90 - 110	7	20

Lab Sample ID: 890-5350-A-11-B MS
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	161	*-	251	411.8		mg/Kg		100	90 - 110

Lab Sample ID: 890-5350-A-11-C MSD
Matrix: Solid
Analysis Batch: 63636

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	161	*-	251	411.4		mg/Kg		100	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

GC VOA

Analysis Batch: 63922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	8021B	63923
890-5353-2	FS02	Total/NA	Solid	8021B	63923
890-5353-3	FS03	Total/NA	Solid	8021B	63923
890-5353-4	FS04	Total/NA	Solid	8021B	63923
890-5353-5	SW01	Total/NA	Solid	8021B	63923
890-5353-6	SW02	Total/NA	Solid	8021B	63923
MB 880-63923/5-A	Method Blank	Total/NA	Solid	8021B	63923
LCS 880-63923/1-A	Lab Control Sample	Total/NA	Solid	8021B	63923
LCSD 880-63923/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63923
880-33935-A-2-D MS	Matrix Spike	Total/NA	Solid	8021B	63923
880-33935-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63923

Prep Batch: 63923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	5035	
890-5353-2	FS02	Total/NA	Solid	5035	
890-5353-3	FS03	Total/NA	Solid	5035	
890-5353-4	FS04	Total/NA	Solid	5035	
890-5353-5	SW01	Total/NA	Solid	5035	
890-5353-6	SW02	Total/NA	Solid	5035	
MB 880-63923/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63923/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-63923/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-33935-A-2-D MS	Matrix Spike	Total/NA	Solid	5035	
880-33935-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	Total BTEX	
890-5353-2	FS02	Total/NA	Solid	Total BTEX	
890-5353-3	FS03	Total/NA	Solid	Total BTEX	
890-5353-4	FS04	Total/NA	Solid	Total BTEX	
890-5353-5	SW01	Total/NA	Solid	Total BTEX	
890-5353-6	SW02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 63537

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	8015NM Prep	
890-5353-2	FS02	Total/NA	Solid	8015NM Prep	
890-5353-3	FS03	Total/NA	Solid	8015NM Prep	
890-5353-4	FS04	Total/NA	Solid	8015NM Prep	
890-5353-5	SW01	Total/NA	Solid	8015NM Prep	
890-5353-6	SW02	Total/NA	Solid	8015NM Prep	
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-5341-A-1-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-5341-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

GC Semi VOA

Analysis Batch: 63579

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	8015B NM	63537
890-5353-2	FS02	Total/NA	Solid	8015B NM	63537
890-5353-3	FS03	Total/NA	Solid	8015B NM	63537
890-5353-4	FS04	Total/NA	Solid	8015B NM	63537
890-5353-5	SW01	Total/NA	Solid	8015B NM	63537
890-5353-6	SW02	Total/NA	Solid	8015B NM	63537
MB 880-63537/1-A	Method Blank	Total/NA	Solid	8015B NM	63537
LCS 880-63537/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	63537
LCSD 880-63537/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	63537
890-5341-A-1-F MS	Matrix Spike	Total/NA	Solid	8015B NM	63537
890-5341-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	63537

Analysis Batch: 63766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Total/NA	Solid	8015 NM	
890-5353-2	FS02	Total/NA	Solid	8015 NM	
890-5353-3	FS03	Total/NA	Solid	8015 NM	
890-5353-4	FS04	Total/NA	Solid	8015 NM	
890-5353-5	SW01	Total/NA	Solid	8015 NM	
890-5353-6	SW02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63490

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Soluble	Solid	DI Leach	
890-5353-2	FS02	Soluble	Solid	DI Leach	
890-5353-3	FS03	Soluble	Solid	DI Leach	
890-5353-4	FS04	Soluble	Solid	DI Leach	
890-5353-5	SW01	Soluble	Solid	DI Leach	
890-5353-6	SW02	Soluble	Solid	DI Leach	
MB 880-63490/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5350-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 63636

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5353-1	FS01	Soluble	Solid	300.0	63490
890-5353-2	FS02	Soluble	Solid	300.0	63490
890-5353-3	FS03	Soluble	Solid	300.0	63490
890-5353-4	FS04	Soluble	Solid	300.0	63490
890-5353-5	SW01	Soluble	Solid	300.0	63490
890-5353-6	SW02	Soluble	Solid	300.0	63490
MB 880-63490/1-A	Method Blank	Soluble	Solid	300.0	63490
LCS 880-63490/2-A	Lab Control Sample	Soluble	Solid	300.0	63490
LCSD 880-63490/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63490
890-5350-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	63490
890-5350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63490

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Client Sample ID: FS01

Lab Sample ID: 890-5353-1

Date Collected: 09/26/23 12:50

Matrix: Solid

Date Received: 09/26/23 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 18:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 18:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			63766	09/29/23 17:10	SM	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 17:10	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 15:59	SMC	EET MID

Client Sample ID: FS02

Lab Sample ID: 890-5353-2

Date Collected: 09/26/23 12:45

Matrix: Solid

Date Received: 09/26/23 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 18:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 18:29	SM	EET MID
Total/NA	Analysis	8015 NM		1			63766	09/29/23 17:33	SM	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 17:33	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:19	SMC	EET MID

Client Sample ID: FS03

Lab Sample ID: 890-5353-3

Date Collected: 09/26/23 12:55

Matrix: Solid

Date Received: 09/26/23 16:20

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	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 18:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 18:49	SM	EET MID
Total/NA	Analysis	8015 NM		1			63766	09/29/23 17:55	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 17:55	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:25	SMC	EET MID

Client Sample ID: FS04

Lab Sample ID: 890-5353-4

Date Collected: 09/26/23 13:00

Matrix: Solid

Date Received: 09/26/23 16:20

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	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 19:10	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 19:10	SM	EET MID

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Lab Chronicle

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
 SDG: 03C1558268

Client Sample ID: FS04

Lab Sample ID: 890-5353-4

Date Collected: 09/26/23 13:00

Matrix: Solid

Date Received: 09/26/23 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			63766	09/29/23 18:17	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 18:17	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:32	SMC	EET MID

Client Sample ID: SW01

Lab Sample ID: 890-5353-5

Date Collected: 09/26/23 13:30

Matrix: Solid

Date Received: 09/26/23 16:20

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	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 19:30	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 19:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			63766	09/29/23 18:39	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 18:39	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:38	SMC	EET MID

Client Sample ID: SW02

Lab Sample ID: 890-5353-6

Date Collected: 09/26/23 14:10

Matrix: Solid

Date Received: 09/26/23 16:20

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63923	10/04/23 08:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	63922	10/04/23 19:50	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64025	10/04/23 19:50	SM	EET MID
Total/NA	Analysis	8015 NM		1			63766	09/29/23 19:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.95 g	10 mL	63537	09/28/23 13:58	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	63579	09/29/23 19:01	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	63490	09/28/23 10:25	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63636	09/29/23 16:45	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

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	T104704400-23-26	06-30-24

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

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

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- 2
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Method Summary

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
 SDG: 03C1558268

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5353-1
SDG: 03C1558268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5353-1	FS01	Solid	09/26/23 12:50	09/26/23 16:20	4
890-5353-2	FS02	Solid	09/26/23 12:45	09/26/23 16:20	4
890-5353-3	FS03	Solid	09/26/23 12:55	09/26/23 16:20	1
890-5353-4	FS04	Solid	09/26/23 13:00	09/26/23 16:20	1
890-5353-5	SW01	Solid	09/26/23 13:30	09/26/23 16:20	0-4
890-5353-6	SW02	Solid	09/26/23 14:10	09/26/23 16:20	0-4

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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
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199



Environment Testing

Xenoco

Work Order No:

www.xenoco.com Page 1 of 1

Project Manager:	Ben Bell	Bill to: (if different)	Garrett Green
Company Name:	ENSOLUM, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Grethe St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0862	Email:	Garrett.Green@ExxonMobil.com

Project Name:	Poker Lake Unit 30H	Turn Around	<input checked="" type="checkbox"/> Routine <input type="checkbox"/> Rush
Project Number:	0301558208	Due Date:	5 days
Project Location:	32.18434, -103.87623	TAT starts the day received by the lab, if received by 4:30pm	
Sampler's Name:	Mariana O'Dell	Temp Blank:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
PO #:		Wet Ice:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Pres. Code
FS01	S	9/29/23	12:50	4'	C	1	Chlorides	
FS02	S		12:45	4'			TPH	
FS03	S		12:55	1'			BTEX	
FS04	S		13:00	1'				
SWD1	S		13:30	0-4'				
SWD2	S		14:20	0-4'				



890-5353 Chain of Custody

Sample Comments
 Incident #:
 NAPP2322640789
 COST CENTER:
 J138881001
 Ben Bell:
 bbell@ensolum.com

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn U V Zn
 (Circle Method(s) and Metal(s) to be analyzed) TCLP/SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Date/Time
M. O'Dell	adrian	9-26	16:20 ²



Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5353-1

SDG Number: 03C1558268

Login Number: 5353

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5353-1

SDG Number: 03C1558268

Login Number: 5353

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 09/28/23 10:44 AM

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

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Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

Attn: Ben Belill
 Ensolum
 601 N. Marienfeld St.
 Suite 400
 Midland, Texas 79701
 Generated 10/12/2023 8:33:41 AM

JOB DESCRIPTION

Poker Lake Unit 301H
 SDG NUMBER 03C1558268

JOB NUMBER

890-5366-1



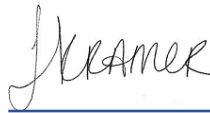
Eurofins Carlsbad

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Authorization



Generated
10/12/2023 8:33:41 AM

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

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Client: Ensolum
Project/Site: Poker Lake Unit 301H

Laboratory Job ID: 890-5366-1
SDG: 03C1558268

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Job ID: 890-5366-1

Laboratory: Eurofins Carlsbad

Narrative**Job Narrative
890-5366-1**

Analytical test results meet all requirements of the associated regulatory program listed on the Accreditation/Certification Summary Page unless otherwise noted under the individual analysis. Data qualifiers are applied to indicate exceptions. Noncompliant quality control (QC) is further explained in narrative comments.

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD may be performed, unless otherwise specified in the method. Surrogate and/or isotope dilution analyte recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in the narrative.

Regulated compliance samples (e.g. SDWA, NPDES) must comply with the associated agency requirements/permits.

Receipt

The samples were received on 9/28/2023 12:23 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-5366-1), FS05 (890-5366-2), FS06 (890-5366-3), FS07 (890-5366-4), FS08 (890-5366-5), SW03 (890-5366-6) and SW04 (890-5366-7).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-63776 and analytical batch 880-64078 were outside control limits for one or more analytes. See QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: PH01 (890-5366-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-63776 and analytical batch 880-64078 was outside the control limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-64404 and analytical batch 880-64423 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: PH01 (890-5366-1), FS05 (890-5366-2), FS06 (890-5366-3), FS08 (890-5366-5), SW03 (890-5366-6), SW04 (890-5366-7), (CCV 880-64423/5), (LCS 880-64404/2-A), (LCSD 880-64404/3-A), (880-34208-A-1-C), (880-34208-A-1-D MS) and (880-34208-A-1-E MSD). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (CCV 880-64423/30). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-64404 and analytical batch 880-64423 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Job ID: 890-5366-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

HPLC/IC

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

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: PH01

Lab Sample ID: 890-5366-1

Date Collected: 09/27/23 09:40

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 19:08	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 19:08	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	65	S1-	70 - 130	10/02/23 15:48	10/06/23 19:08	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/02/23 15:48	10/06/23 19:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 19:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/11/23 13:16	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/10/23 15:31	10/11/23 13:16	1
Diesel Range Organics (Over C10-C28)	<49.9	U ** *1	49.9	mg/Kg		10/10/23 15:31	10/11/23 13:16	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/10/23 15:31	10/11/23 13:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	134	S1+	70 - 130	10/10/23 15:31	10/11/23 13:16	1
o-Terphenyl	118		70 - 130	10/10/23 15:31	10/11/23 13:16	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	139		5.02	mg/Kg			10/04/23 09:47	1

Client Sample ID: FS05

Lab Sample ID: 890-5366-2

Date Collected: 09/27/23 10:30

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:34	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:34	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 19:34	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 19:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 19:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130	10/02/23 15:48	10/06/23 19:34	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: FS05

Lab Sample ID: 890-5366-2

Date Collected: 09/27/23 10:30

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 2

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130	10/02/23 15:48	10/06/23 19:34	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 19:34	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			10/11/23 13:38	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3	mg/Kg		10/10/23 15:31	10/11/23 13:38	1
Diesel Range Organics (Over C10-C28)	<50.3	U ** *1	50.3	mg/Kg		10/10/23 15:31	10/11/23 13:38	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3	mg/Kg		10/10/23 15:31	10/11/23 13:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	153	S1+	70 - 130	10/10/23 15:31	10/11/23 13:38	1
o-Terphenyl	135	S1+	70 - 130	10/10/23 15:31	10/11/23 13:38	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	117		5.03	mg/Kg			10/04/23 09:53	1

Client Sample ID: FS06

Lab Sample ID: 890-5366-3

Date Collected: 09/27/23 10:35

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/02/23 15:48	10/06/23 20:00	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/02/23 15:48	10/06/23 20:00	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/02/23 15:48	10/06/23 20:00	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/02/23 15:48	10/06/23 20:00	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/02/23 15:48	10/06/23 20:00	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/02/23 15:48	10/06/23 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	10/02/23 15:48	10/06/23 20:00	1
1,4-Difluorobenzene (Surr)	123		70 - 130	10/02/23 15:48	10/06/23 20:00	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/06/23 20:00	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2	mg/Kg			10/11/23 14:00	1

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Client Sample Results

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
 SDG: 03C1558268

Client Sample ID: FS06

Lab Sample ID: 890-5366-3

Date Collected: 09/27/23 10:35

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2	mg/Kg		10/10/23 15:31	10/11/23 14:00	1
Diesel Range Organics (Over C10-C28)	<50.2	U *+ *1	50.2	mg/Kg		10/10/23 15:31	10/11/23 14:00	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2	mg/Kg		10/10/23 15:31	10/11/23 14:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	141	S1+	70 - 130	10/10/23 15:31	10/11/23 14:00	1
o-Terphenyl	124		70 - 130	10/10/23 15:31	10/11/23 14:00	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	69.3		5.05	mg/Kg			10/04/23 09:59	1

Client Sample ID: FS07

Lab Sample ID: 890-5366-4

Date Collected: 09/27/23 14:40

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/02/23 15:48	10/06/23 20:26	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/02/23 15:48	10/06/23 20:26	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/02/23 15:48	10/06/23 20:26	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		10/02/23 15:48	10/06/23 20:26	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/02/23 15:48	10/06/23 20:26	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		10/02/23 15:48	10/06/23 20:26	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130	10/02/23 15:48	10/06/23 20:26	1
1,4-Difluorobenzene (Surr)	121		70 - 130	10/02/23 15:48	10/06/23 20:26	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			10/06/23 20:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			10/11/23 14:22	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:22	1
Diesel Range Organics (Over C10-C28)	<50.5	U *+ *1	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:22	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130	10/10/23 15:31	10/11/23 14:22	1
o-Terphenyl	107		70 - 130	10/10/23 15:31	10/11/23 14:22	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: FS07

Lab Sample ID: 890-5366-4

Date Collected: 09/27/23 14:40

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 4

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1320		50.0	mg/Kg			10/04/23 10:05	10

Client Sample ID: FS08

Lab Sample ID: 890-5366-5

Date Collected: 09/27/23 10:45

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 20:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			10/02/23 15:48	10/06/23 20:53	1
1,4-Difluorobenzene (Surr)	110		70 - 130			10/02/23 15:48	10/06/23 20:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 20:53	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			10/11/23 14:44	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:44	1
Diesel Range Organics (Over C10-C28)	<50.5	U *+ *1	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:44	1
Oll Range Organics (Over C28-C36)	<50.5	U	50.5	mg/Kg		10/10/23 15:31	10/11/23 14:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	142	S1+	70 - 130			10/10/23 15:31	10/11/23 14:44	1
o-Terphenyl	124		70 - 130			10/10/23 15:31	10/11/23 14:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	122		5.00	mg/Kg			10/04/23 10:11	1

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: SW03

Lab Sample ID: 890-5366-6

Date Collected: 09/27/23 10:40

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 0-2

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/02/23 15:48	10/06/23 21:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			10/02/23 15:48	10/06/23 21:19	1
1,4-Difluorobenzene (Surr)	115		70 - 130			10/02/23 15:48	10/06/23 21:19	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/06/23 21:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1	mg/Kg			10/11/23 15:06	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1	mg/Kg		10/10/23 15:31	10/11/23 15:06	1
Diesel Range Organics (Over C10-C28)	<50.1	U ** *1	50.1	mg/Kg		10/10/23 15:31	10/11/23 15:06	1
Oil Range Organics (Over C28-C36)	<50.1	U	50.1	mg/Kg		10/10/23 15:31	10/11/23 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	159	S1+	70 - 130			10/10/23 15:31	10/11/23 15:06	1
o-Terphenyl	139	S1+	70 - 130			10/10/23 15:31	10/11/23 15:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		5.02	mg/Kg			10/04/23 10:16	1

Client Sample ID: SW04

Lab Sample ID: 890-5366-7

Date Collected: 09/27/23 14:25

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 0-4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/02/23 15:48	10/06/23 21:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			10/02/23 15:48	10/06/23 21:46	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: SW04

Lab Sample ID: 890-5366-7

Date Collected: 09/27/23 14:25

Matrix: Solid

Date Received: 09/28/23 12:23

Sample Depth: 0-4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	10/02/23 15:48	10/06/23 21:46	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/06/23 21:46	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/11/23 15:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/10/23 15:32	10/11/23 15:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U ** *1	49.9	mg/Kg		10/10/23 15:32	10/11/23 15:28	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/10/23 15:32	10/11/23 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	151	S1+	70 - 130	10/10/23 15:32	10/11/23 15:28	1
o-Terphenyl	135	S1+	70 - 130	10/10/23 15:32	10/11/23 15:28	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	60.4		5.01	mg/Kg			10/04/23 10:22	1

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	BFB1	DFBZ1
		(70-130)	(70-130)
890-5365-A-1-G MS	Matrix Spike	88	107
890-5365-A-1-H MSD	Matrix Spike Duplicate	91	103
890-5366-1	PH01	65 S1-	80
890-5366-2	FS05	89	104
890-5366-3	FS06	113	123
890-5366-4	FS07	102	121
890-5366-5	FS08	95	110
890-5366-6	SW03	111	115
890-5366-7	SW04	94	99
LCS 880-63776/1-A	Lab Control Sample	90	104
LCSD 880-63776/2-A	Lab Control Sample Dup	89	103
MB 880-63776/5-A	Method Blank	55 S1-	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)

Lab Sample ID	Client Sample ID	1CO1	OTPH1
		(70-130)	(70-130)
880-34208-A-1-D MS	Matrix Spike	170 S1+	138 S1+
880-34208-A-1-E MSD	Matrix Spike Duplicate	171 S1+	138 S1+
890-5366-1	PH01	134 S1+	118
890-5366-2	FS05	153 S1+	135 S1+
890-5366-3	FS06	141 S1+	124
890-5366-4	FS07	122	107
890-5366-5	FS08	142 S1+	124
890-5366-6	SW03	159 S1+	139 S1+
890-5366-7	SW04	151 S1+	135 S1+
LCS 880-64404/2-A	Lab Control Sample	137 S1+	148 S1+
LCSD 880-64404/3-A	Lab Control Sample Dup	151 S1+	144 S1+
MB 880-64404/1-A	Method Blank	200 S1+	196 S1+

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-63776/5-A
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 63776

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 11:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 11:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 11:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/02/23 15:48	10/06/23 11:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/02/23 15:48	10/06/23 11:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/02/23 15:48	10/06/23 11:38	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55	S1-	70 - 130	10/02/23 15:48	10/06/23 11:38	1
1,4-Difluorobenzene (Surr)	96		70 - 130	10/02/23 15:48	10/06/23 11:38	1

Lab Sample ID: LCS 880-63776/1-A
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 63776

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07044		mg/Kg		70	70 - 130
Toluene	0.100	0.08066		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07569		mg/Kg		76	70 - 130
m-Xylene & p-Xylene	0.200	0.1494		mg/Kg		75	70 - 130
o-Xylene	0.100	0.07498		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-63776/2-A
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 63776

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.07310		mg/Kg		73	70 - 130	4	35
Toluene	0.100	0.07874		mg/Kg		79	70 - 130	2	35
Ethylbenzene	0.100	0.07952		mg/Kg		80	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1580		mg/Kg		79	70 - 130	6	35
o-Xylene	0.100	0.07679		mg/Kg		77	70 - 130	2	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-5365-A-1-G MS
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63776

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00199	U F1	0.0998	0.06917	F1	mg/Kg		69	70 - 130
Toluene	<0.00199	U F1	0.0998	0.06608	F1	mg/Kg		66	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

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

Lab Sample ID: 890-5365-A-1-G MS
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 63776

Analyte	Sample	Sample	Spike Added	MS	MS	Unit	D	%Rec	%Rec Limits
	Result	Qualifier		Result	Qualifier				
Ethylbenzene	<0.00199	U F1	0.0998	0.05899	F1	mg/Kg		58	70 - 130
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1130	F1	mg/Kg		57	70 - 130
o-Xylene	<0.00199	U F1	0.0998	0.05946	F1	mg/Kg		60	70 - 130

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 890-5365-A-1-H MSD
Matrix: Solid
Analysis Batch: 64078

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 63776

Analyte	Sample	Sample	Spike Added	MSD	MSD	Unit	D	%Rec	%Rec Limits	RPD	Limit
	Result	Qualifier		Result	Qualifier						
Benzene	<0.00199	U F1	0.0990	0.05614	F1	mg/Kg		57	70 - 130	21	35
Toluene	<0.00199	U F1	0.0990	0.05472	F1	mg/Kg		55	70 - 130	19	35
Ethylbenzene	<0.00199	U F1	0.0990	0.04984	F1	mg/Kg		49	70 - 130	17	35
m-Xylene & p-Xylene	<0.00398	U F1	0.198	0.09469	F1	mg/Kg		48	70 - 130	18	35
o-Xylene	<0.00199	U F1	0.0990	0.04966	F1	mg/Kg		50	70 - 130	18	35

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

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

Lab Sample ID: MB 880-64404/1-A
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64404

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/10/23 15:30	10/11/23 09:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/10/23 15:30	10/11/23 09:15	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/10/23 15:30	10/11/23 09:15	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1-Chlorooctane	200	S1+	70 - 130	10/10/23 15:30	10/11/23 09:15	1
o-Terphenyl	196	S1+	70 - 130	10/10/23 15:30	10/11/23 09:15	1

Lab Sample ID: LCS 880-64404/2-A
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64404

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
Gasoline Range Organics (GRO)-C6-C10	1000	922.1		mg/Kg		92	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1019		mg/Kg		102	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

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

Lab Sample ID: LCS 880-64404/2-A
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64404

Surrogate	LCS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	137	S1+	70 - 130
o-Terphenyl	148	S1+	70 - 130

Lab Sample ID: LCSD 880-64404/3-A
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64404

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
							Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	1000	997.7		mg/Kg		100	70 - 130	8		20
Diesel Range Organics (Over C10-C28)	1000	1371	*+ *1	mg/Kg		137	70 - 130	29		20

Surrogate	LCSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	151	S1+	70 - 130
o-Terphenyl	144	S1+	70 - 130

Lab Sample ID: 880-34208-A-1-D MS
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 64404

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	999	953.8		mg/Kg		94	70 - 130			
Diesel Range Organics (Over C10-C28)	<49.6	U *+ *1	999	1308		mg/Kg		129	70 - 130			

Surrogate	MS		Limits
	%Recovery	Qualifier	
1-Chlorooctane	170	S1+	70 - 130
o-Terphenyl	138	S1+	70 - 130

Lab Sample ID: 880-34208-A-1-E MSD
Matrix: Solid
Analysis Batch: 64423

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 64404

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec		RPD	Limit
									Limits	RPD		
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	999	942.2		mg/Kg		92	70 - 130	1		20
Diesel Range Organics (Over C10-C28)	<49.6	U *+ *1	999	1307		mg/Kg		129	70 - 130	0		20

Surrogate	MSD		Limits
	%Recovery	Qualifier	
1-Chlorooctane	171	S1+	70 - 130
o-Terphenyl	138	S1+	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-63653/1-A
Matrix: Solid
Analysis Batch: 63879

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/03/23 17:25	1

Lab Sample ID: LCS 880-63653/2-A
Matrix: Solid
Analysis Batch: 63879

Client Sample ID: Lab Control Sample
Prep Type: Soluble

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

Lab Sample ID: LCSD 880-63653/3-A
Matrix: Solid
Analysis Batch: 63879

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	238.2		mg/Kg		95	90 - 110	0	20

Lab Sample ID: 890-5365-A-11-B MS
Matrix: Solid
Analysis Batch: 63879

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	842		248	1106		mg/Kg		107	90 - 110

Lab Sample ID: 890-5365-A-11-C MSD
Matrix: Solid
Analysis Batch: 63879

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	842		248	1104		mg/Kg		106	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

GC VOA

Prep Batch: 63776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	5035	
890-5366-2	FS05	Total/NA	Solid	5035	
890-5366-3	FS06	Total/NA	Solid	5035	
890-5366-4	FS07	Total/NA	Solid	5035	
890-5366-5	FS08	Total/NA	Solid	5035	
890-5366-6	SW03	Total/NA	Solid	5035	
890-5366-7	SW04	Total/NA	Solid	5035	
MB 880-63776/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-63776/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCS 880-63776/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5365-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-5365-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 64078

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	8021B	63776
890-5366-2	FS05	Total/NA	Solid	8021B	63776
890-5366-3	FS06	Total/NA	Solid	8021B	63776
890-5366-4	FS07	Total/NA	Solid	8021B	63776
890-5366-5	FS08	Total/NA	Solid	8021B	63776
890-5366-6	SW03	Total/NA	Solid	8021B	63776
890-5366-7	SW04	Total/NA	Solid	8021B	63776
MB 880-63776/5-A	Method Blank	Total/NA	Solid	8021B	63776
LCS 880-63776/1-A	Lab Control Sample	Total/NA	Solid	8021B	63776
LCS 880-63776/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	63776
890-5365-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	63776
890-5365-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	63776

Analysis Batch: 64291

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	Total BTEX	
890-5366-2	FS05	Total/NA	Solid	Total BTEX	
890-5366-3	FS06	Total/NA	Solid	Total BTEX	
890-5366-4	FS07	Total/NA	Solid	Total BTEX	
890-5366-5	FS08	Total/NA	Solid	Total BTEX	
890-5366-6	SW03	Total/NA	Solid	Total BTEX	
890-5366-7	SW04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 64404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	8015NM Prep	
890-5366-2	FS05	Total/NA	Solid	8015NM Prep	
890-5366-3	FS06	Total/NA	Solid	8015NM Prep	
890-5366-4	FS07	Total/NA	Solid	8015NM Prep	
890-5366-5	FS08	Total/NA	Solid	8015NM Prep	
890-5366-6	SW03	Total/NA	Solid	8015NM Prep	
890-5366-7	SW04	Total/NA	Solid	8015NM Prep	
MB 880-64404/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-64404/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

GC Semi VOA (Continued)

Prep Batch: 64404 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-64404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-34208-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-34208-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 64423

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	8015B NM	64404
890-5366-2	FS05	Total/NA	Solid	8015B NM	64404
890-5366-3	FS06	Total/NA	Solid	8015B NM	64404
890-5366-4	FS07	Total/NA	Solid	8015B NM	64404
890-5366-5	FS08	Total/NA	Solid	8015B NM	64404
890-5366-6	SW03	Total/NA	Solid	8015B NM	64404
890-5366-7	SW04	Total/NA	Solid	8015B NM	64404
MB 880-64404/1-A	Method Blank	Total/NA	Solid	8015B NM	64404
LCS 880-64404/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	64404
LCSD 880-64404/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	64404
880-34208-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	64404
880-34208-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	64404

Analysis Batch: 64526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Total/NA	Solid	8015 NM	
890-5366-2	FS05	Total/NA	Solid	8015 NM	
890-5366-3	FS06	Total/NA	Solid	8015 NM	
890-5366-4	FS07	Total/NA	Solid	8015 NM	
890-5366-5	FS08	Total/NA	Solid	8015 NM	
890-5366-6	SW03	Total/NA	Solid	8015 NM	
890-5366-7	SW04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 63653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Soluble	Solid	DI Leach	
890-5366-2	FS05	Soluble	Solid	DI Leach	
890-5366-3	FS06	Soluble	Solid	DI Leach	
890-5366-4	FS07	Soluble	Solid	DI Leach	
890-5366-5	FS08	Soluble	Solid	DI Leach	
890-5366-6	SW03	Soluble	Solid	DI Leach	
890-5366-7	SW04	Soluble	Solid	DI Leach	
MB 880-63653/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-63653/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-63653/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5365-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-5365-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 63879

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-1	PH01	Soluble	Solid	300.0	63653
890-5366-2	FS05	Soluble	Solid	300.0	63653
890-5366-3	FS06	Soluble	Solid	300.0	63653

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

HPLC/IC (Continued)

Analysis Batch: 63879 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5366-4	FS07	Soluble	Solid	300.0	63653
890-5366-5	FS08	Soluble	Solid	300.0	63653
890-5366-6	SW03	Soluble	Solid	300.0	63653
890-5366-7	SW04	Soluble	Solid	300.0	63653
MB 880-63653/1-A	Method Blank	Soluble	Solid	300.0	63653
LCS 880-63653/2-A	Lab Control Sample	Soluble	Solid	300.0	63653
LCSD 880-63653/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	63653
890-5365-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	63653
890-5365-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	63653

- 1
- 2
- 3
- 4
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- 10
- 11
- 12
- 13
- 14

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: PH01

Lab Sample ID: 890-5366-1

Date Collected: 09/27/23 09:40

Matrix: Solid

Date Received: 09/28/23 12:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 19:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 19:08	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 13:16	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 13:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 09:47	CH	EET MID

Client Sample ID: FS05

Lab Sample ID: 890-5366-2

Date Collected: 09/27/23 10:30

Matrix: Solid

Date Received: 09/28/23 12:23

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	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 19:34	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 19:34	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 13:38	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 13:38	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 09:53	CH	EET MID

Client Sample ID: FS06

Lab Sample ID: 890-5366-3

Date Collected: 09/27/23 10:35

Matrix: Solid

Date Received: 09/28/23 12:23

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	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 20:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 20:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 14:00	SM	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 14:00	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 09:59	CH	EET MID

Client Sample ID: FS07

Lab Sample ID: 890-5366-4

Date Collected: 09/27/23 14:40

Matrix: Solid

Date Received: 09/28/23 12:23

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	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 20:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 20:26	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: FS07

Lab Sample ID: 890-5366-4

Date Collected: 09/27/23 14:40

Matrix: Solid

Date Received: 09/28/23 12:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			64526	10/11/23 14:22	SM	EET MID
Total/NA	Prep	8015NM Prep			9.90 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 14:22	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	63879	10/04/23 10:05	CH	EET MID

Client Sample ID: FS08

Lab Sample ID: 890-5366-5

Date Collected: 09/27/23 10:45

Matrix: Solid

Date Received: 09/28/23 12:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 20:53	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 20:53	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 14:44	SM	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 14:44	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 10:11	CH	EET MID

Client Sample ID: SW03

Lab Sample ID: 890-5366-6

Date Collected: 09/27/23 10:40

Matrix: Solid

Date Received: 09/28/23 12:23

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	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 21:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 21:19	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 15:06	SM	EET MID
Total/NA	Prep	8015NM Prep			9.99 g	10 mL	64404	10/10/23 15:31	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 15:06	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 10:16	CH	EET MID

Client Sample ID: SW04

Lab Sample ID: 890-5366-7

Date Collected: 09/27/23 14:25

Matrix: Solid

Date Received: 09/28/23 12:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	63776	10/02/23 15:48	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	64078	10/06/23 21:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			64291	10/06/23 21:46	SM	EET MID
Total/NA	Analysis	8015 NM		1			64526	10/11/23 15:28	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	64404	10/10/23 15:32	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	64423	10/11/23 15:28	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Client Sample ID: SW04

Lab Sample ID: 890-5366-7

Date Collected: 09/27/23 14:25

Matrix: Solid

Date Received: 09/28/23 12:23

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	63653	09/29/23 13:31	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	63879	10/04/23 10:22	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

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	T104704400-23-26	06-30-24

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

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

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Method Summary

Client: Ensolum
 Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
 SDG: 03C1558268

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

Protocol References:

- ASTM = ASTM International
- EPA = US Environmental Protection Agency
- SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.
- TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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



Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 301H

Job ID: 890-5366-1
SDG: 03C1558268

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5366-1	PH01	Solid	09/27/23 09:40	09/28/23 12:23	2
890-5366-2	FS05	Solid	09/27/23 10:30	09/28/23 12:23	2
890-5366-3	FS06	Solid	09/27/23 10:35	09/28/23 12:23	2
890-5366-4	FS07	Solid	09/27/23 14:40	09/28/23 12:23	4
890-5366-5	FS08	Solid	09/27/23 10:45	09/28/23 12:23	4
890-5366-6	SW03	Solid	09/27/23 10:40	09/28/23 12:23	0-2
890-5366-7	SW04	Solid	09/27/23 14:25	09/28/23 12:23	0-4

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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) 835-2222, Lubbock, TX (806) 799-4296
 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Environment Testing

Xenco

Work Order No:

www.xenco.com Page 1 of 1

Project Manager: Ben Bellil
 Company Name: ENSOLUM, LLC
 Address: 3122 National Parks Hwy
 City, State ZIP: Carlsbad, NM 88220
 Phone: 989-854-0852
 Email: Garrett.Green@ExxonMobil.com

Bill to: (if different)
 Company Name: XTO Energy
 Address: 3104 E. Greene St
 City, State ZIP: Carlsbad, NM 88220
 Email: Garrett.Green@ExxonMobil.com

Work Order Comments

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

Project Name: Poker Lake Unit 301H
 Project Number: 03C1558208
 Project Location: 32.184310 - 103.81523
 Sampler's Name: Mariaha O'Dell
 PO #:
 Turn Around: Routine Rush
 Due Date: 6 days
 TAT starts the day received by the lab, if received by 4:30pm
 Wet Ice: Yes No Yes No
 Thermometer ID: -10007
 Correction Factor: -0.2
 Temperature Reading: 58
 Corrected Temperature: 3.6

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters		Pres. Code	ANALYSIS REQUEST	Preservative Codes	Sample Comments
							Yes	No				
PH01	S	9/27/23	0:40	2'	G	1	Chlorides	X		None: NO	DI Water: H ₂ O	Incident #:
FS05			10:30	2'	G			X		Cool: Cool	MeOH: Me	NAPP 2322640189
FS06			10:35	2'	G			X		HCL: HC	HNO ₃ : HN	COST CENTER:
FS07			14:40	4'						H ₂ SO ₄ : H ₂	NaOH: Na	1138881001
FS08			10:45	4'						H ₂ PO ₄ : HP		Ben Bellil
SW03			10:40	0-4'						NaHSO ₄ : NABIS		bdell@ensolum.com
SW04			14:25	0-4'						Na ₂ S ₂ O ₃ : NaSO ₃		
										Zn Acetate+NaOH: Zn		
										NaOH+Ascorbic Acid: SPC		

Total 2007 / 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 SiO₂ Na Sr Tl Sn U V Zn
 Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Hg: 1631 / 245.1 / 7470 / 7471

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	9-29 12:23 ²			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5366-1

SDG Number: 03C1558268

Login Number: 5366

List Number: 1

Creator: Lopez, Abraham

List Source: Eurofins Carlsbad

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

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5366-1

SDG Number: 03C1558268

Login Number: 5366

List Source: Eurofins Midland

List Number: 2

List Creation: 09/29/23 11:04 AM

Creator: Rodriguez, Leticia

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

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APPENDIX E
NMOCD Notifications

From: [Tacoma Morrissey](#)
To: [Aimee Cole](#)
Subject: FW: XTO - Sampling Notification (Week of 9/18/23 - 9/22/23)
Date: Wednesday, October 25, 2023 8:37:52 AM
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)



Tacoma Morrissey

Senior Geologist

337-257-8307

Ensolum, LLC



From: Ben Belill <bbelill@ensolum.com>

Sent: Wednesday, September 13, 2023 5:19 PM

To: Garrett Green (garrett.green@exxonmobil.com) <garrett.green@exxonmobil.com>; Melanie Collins (melanie.collins@exxonmobil.com) <melanie.collins@exxonmobil.com>; Lambert, Tommee L <tommee.l.lambert@exxonmobil.com>; amy.ruth@exxonmobil.com

Cc: DelawareSpills@exxonmobil.com; Tacoma Morrissey <tmorrissey@ensolum.com>; Ashley Ager <aager@ensolum.com>; Ashley Giovengo <agiovengo@ensolum.com>; Wes Weichert <wweichert@ensolum.com>

Subject: XTO - Sampling Notification (Week of 9/18/23 - 9/22/23)

Hi Garrett,

Please see the email below for NMOCD sampling notification. None of these are located on State Land.

All,

XTO plans to complete final sampling activities at the sites listed below for the week of September 18, 2023.

Monday

- PLU 29 Big Sinks West CTB / NAPP2320634792

Tuesday

- Indian Flats Bass 6 / NMAP1823048577

Wednesday

- Indian Flats Bass 6 / NMAP1823048577

Thursday

- JRU 29 DI 9 Riser / NAPP2322141858

Friday

- JRU 29 DI 9 Riser / NAPP2322141858
- Poker Lake Unit 301H / NAPP2322646789

Thank you,



Benjamin Belill

Project Geologist

989-854-0852

Ensolum, LLC



From: [Rodgers, Scott, EMNRD](#)
To: [Green, Garrett J](#); [Bratcher, Michael, EMNRD](#); [Hamlet, Robert, EMNRD](#); [Velez, Nelson, EMNRD](#)
Cc: [Ben Belill](#); [DelawareSpills /SM](#); [Collins, Melanie](#)
Subject: RE: [EXTERNAL] XTO - Sampling Notification (Week of 9/25/23 - 9/29/23)
Date: Wednesday, September 20, 2023 5:41:28 PM

You don't often get email from scott.rodgers@emnrd.nm.gov. [Learn why this is important](#)

[**EXTERNAL EMAIL]**

The OCD has received your notification. When reporting sampling at multiple locations it is required to provide and date and time for each location. 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.

Scott Rodgers • Environmental Specialist
 Environmental Bureau
 EMNRD - Oil Conservation Division
 8801 Horizon Blvd. NE, Suite 260 | Albuquerque, NM 87113
 505.469.1830 | scott.rodgers@emnrd.nm.gov
<http://www.emnrd.nm.gov/oed>



From: Green, Garrett J <garrett.green@exxonmobil.com>
Sent: Wednesday, September 20, 2023 3:18 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Ben Belill <bbelill@ensolum.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Collins, Melanie <melanie.collins@exxonmobil.com>
Subject: [EXTERNAL] XTO - Sampling Notification (Week of 9/25/23 - 9/29/23)

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

All,

XTO plans to complete final sampling activities at the sites listed below for the week of September 25, 2023.

Monday

- JRU 21 DI 9 Riser / NAPP2322141858
- Poker Lake Unit 301H / NAPP2322646789

Tuesday

- North Indian Flats 26 Fed 1 / nAPP2323653065
- Poker Lake Unit 301H / NAPP2322646789

Wednesday

- North Indian Flats 26 Fed 1 / nAPP2323653065
- BEU 70 / NAPP2318139530

Thursday

- PLU 15 Twin Wells Ranch CTB / Napp2323449490
- Perla Verde 31 State Battery / nAPP2322751480 (SLO)

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

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

General Information
Phone: (505) 629-6116

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

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

QUESTIONS

Action 566604

QUESTIONS

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2322646789
Incident Name	NAPP2322646789 POKER LAKE UNIT 301H @ M-27-24S-30E
Incident Type	Produced Water Release
Incident Status	Reclamation Report Received

Location of Release Source	
<i>Please answer all the questions in this group.</i>	
Site Name	POKER LAKE UNIT 301H
Date Release Discovered	07/31/2023
Surface Owner	Federal

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

Nature and Volume of Release	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Cause: Corrosion Flow Line - Production Crude Oil Released: 1 BBL Recovered: 0 BBL Lost: 1 BBL.
Produced Water Released (bbls) Details	Cause: Corrosion Flow Line - Production Produced Water Released: 5 BBL Recovered: 1 BBL Lost: 4 BBL.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Not answered.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

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

QUESTIONS, Page 2

Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

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

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	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEEnvNotifications@exxonmobil.com Date: 03/25/2026
--	--

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

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

QUESTIONS, Page 3

Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

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

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 100 and 500 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Between 300 and 500 (ft.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Greater than 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Between 1 and 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Between 1 and 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between ½ and 1 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Between 1 and 5 (mi.)
Categorize the risk of this well / site being in a karst geology	Low
A 100-year floodplain	Between ½ and 1 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	Yes

Remediation Plan

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

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

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

Chloride (EPA 300.0 or SM4500 Cl B)	1480
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	169
GRO+DRO (EPA SW-846 Method 8015M)	169
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

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

On what estimated date will the remediation commence	08/30/2023
On what date will (or did) the final sampling or liner inspection occur	09/27/2023
On what date will (or was) the remediation complete(d)	09/27/2023
What is the estimated surface area (in square feet) that will be reclaimed	1380
What is the estimated volume (in cubic yards) that will be reclaimed	160
What is the estimated surface area (in square feet) that will be remediated	1380
What is the estimated volume (in cubic yards) that will be remediated	160

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

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

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

QUESTIONS, Page 4

Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Remediation Plan (continued)

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

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

(Select all answers below that apply.)

(Ex Situ) Excavation and off-site disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for off-site disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
OR which OCD approved well (API) will be used for off-site disposal	Not answered.
OR is the off-site disposal site, to be used, out-of-state	Not answered.
OR is the off-site disposal site, to be used, an NMED facility	Not answered.
(Ex Situ) Excavation and on-site remediation (i.e. On-Site Land Farms)	Not answered.
(In Situ) Soil Vapor Extraction	Not answered.
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	Not answered.
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	Not answered.
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	Not answered.
Ground Water Abatement pursuant to 19.15.30 NMAC	Not answered.
OTHER (Non-listed remedial process)	Not answered.

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

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

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 03/25/2026
--	---

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

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Santa Fe, NM 87505

QUESTIONS, Page 5

Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Deferral Requests Only	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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Oil Conservation Division
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Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Sampling Event Information	
Last sampling notification (C-141N) recorded	473668
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	06/20/2025
What was the (estimated) number of samples that were to be gathered	1
What was the sampling surface area in square feet	200

Remediation Closure Request

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

Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	1380
What was the total volume (cubic yards) remediated	160
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	1380
What was the total volume (in cubic yards) reclaimed	160

Summarize any additional remediation activities not included by answers (above)	Site assessment and excavation activities were conducted at the Site to address the July 31, 2023, release of crude oil and produced water. Laboratory analytical results for excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and reclamation requirements, where applicable. Additionally, the release was laterally and delineated to below the most stringent Table I Closure Criteria by assessment samples SS04, SS06, and SS07 and sidewall samples SW01 through SW04. Based on the soil sample laboratory analytical results, no further remediation is required. XTO will backfill the excavation with topsoil purchased locally and recontour the Site to match pre-existing site conditions. The disturbed pasture area will be seeded with a BLM-approved seed mixture. Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. Depth to groundwater is greater than 100 feet bgs and no sensitive receptors were identified near the release extent. XTO believes the remedial actions completed at the Site are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2322646789. NMOCD notifications are included in Appendix E.
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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 (in .pdf format) 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.

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.

I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 03/25/2026
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Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Reclamation Report	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	Yes
What was the total reclamation surface area (in square feet) for this site	1380
What was the total volume of replacement material (in cubic yards) for this site	160
<i>Per Paragraph (1) of Subsection D of 19.15.29.13 NMAC the reclamation must contain a minimum of four feet of non-waste containing, uncontaminated, earthen material with chloride concentrations less than 600 mg/kg as analyzed by EPA Method 300.0, or other test methods approved by the division. The soil cover must include a top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater.</i>	
Is the soil top layer complete and is it suitable material to establish vegetation	Yes
On what (estimated) date will (or was) the reseeded commence(d)	04/15/2026
Summarize any additional reclamation activities not included by answers (above)	Following backfill activities, the disturbed area was contoured to match the surrounding topography and the surface was prepared for seeding. Upon confirmation that the excavation was backfilled with non-waste containing material, the disturbed pasture area will be seeded with a certified weed-free seed mix. The BLM Seed Mix #3 will be used to seed the Site. The seed mix will be applied via drill seeding. The Site will be monitored for vegetation growth to ensure that reclamation activities were successful.
<i>The responsible party must attach information demonstrating they have complied with all applicable reclamation requirements and any conditions or directives of the OCD. This demonstration should be in the form of attachments (in .pdf format) including a scaled site map, any proposed reseeded plans or relevant field notes, photographs of reclaimed area, and a narrative of the reclamation activities. Refer to 19.15.29.13 NMAC.</i>	
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.	
I hereby agree and sign off to the above statement	Name: Richard Kotzur Title: Senior Project Manager Email: NMEnvNotifications@exxonmobil.com Date: 03/25/2026

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Action 566604

QUESTIONS (continued)

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

QUESTIONS

Revegetation Report	
<i>Only answer the questions in this group if all surface restoration, reclamation and re-vegetation obligations have been satisfied.</i>	
Requesting a restoration complete approval with this submission	No
<i>Per Paragraph (4) of Subsection (D) of 19.15.29.13 NMAC for any major or minor release containing liquids, the responsible party must notify the division when reclamation and re-vegetation are complete.</i>	

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CONDITIONS

Action 566604

CONDITIONS

Operator: XTO ENERGY, INC 3617 North Big Spring Street Midland, TX 79705	OGRID: 5380
	Action Number: 566604
	Action Type: [C-141] Reclamation Report C-141 (C-141-v-Reclamation)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your Reclamation Report for Incident #nAPP2322646789 POKER LAKE UNIT 301H, thank you. This Reclamation Report is approved.	3/30/2026