

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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAB1834656162
District RP	2 2RP-5102
Facility ID	
Application ID	pAB1834654349

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Kyle Littrell	Contact Telephone 432-221-7331
Contact email Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD) NAB1834656162
Contact mailing address 522 W. Mermod, Carlsbad, NM 88220	

Location of Release Source

Latitude 32.096080° Longitude -103.778375°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name Poker Lake Unit #420 Battery	Site Type Bulk Storage and Separation Facility
Date Release Discovered 11/19/2018	API# (if applicable) 30-015-39795

Unit Letter	Section	Township	Range	County
P	28	25S	31E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 19.5	Volume Recovered (bbls) 18
☒ Produced Water	Volume Released (bbls) 2.2	Volume Recovered (bbls) 2
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Fluids were released to the well pad from the heater treater when a gasket failed. A vacuum truck recovered free standing fluids and the gasket was repaired. An environmental contractor has been retained to assist with remediation efforts.

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Was this a major release as defined by 19.15.29.7(A) NMAC? ☐ Yes ☒ No	If YES, for what reason(s) does the responsible party consider this a major release? N/A
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? N/A	

Initial Response

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

☒ The source of the release has been stopped. ☒ The impacted area has been secured to protect human health and the environment. ☒ Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. ☒ All free liquids and recoverable materials have been removed and managed appropriately.	
If all the actions described above have <u>not</u> been undertaken, explain why:	
Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.	
I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.	
Printed Name: <u>Kyle Littrell</u> Signature: <u></u> email: <u>Kyle_Littrell@xtoenergy.com</u>	Title: <u>SH&E Coordinator</u> Date: <u>12-4-18</u> Telephone: <u>432-221-7331</u>
OCD Only Received by: <u></u> Date: <u>12/12/18</u>	

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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

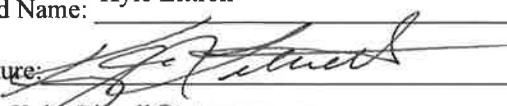
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

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Printed Name: Kyle Littrell

Title: SH&E Coordinator

Signature: 

Date: 12-4-18

email: Kyle.Littrell@xtoenergy.com

Telephone: 432-221-7331

OCD OnlyReceived by: 

Date: 12/12/2018

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State of New Mexico

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Closure

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Coordinator
Signature:  Date: 2-28-19
email: kyle_littrell@xtoenenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: Ashley Maxwell Date: 9/26/2023
Printed Name: Ashley Maxwell Title: Environmental Specialist

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Remediation Plan

Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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Printed Name: Kyle Littrell Title: SH&E Coordinator
Signature: [Signature] Date: 2-28-19
email: kyle_littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: Robert Hamlet Date: 3/18/2019

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☒ Deferral Approved

Signature: [Signature] Date: 3/18/2019

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Facility ID	
Application ID	

Closure

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

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

- ☒ A scaled site and sampling diagram as described in 19.15.29.11 NMAC
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Printed Name: Garrett Green

Title: SSHE Coordinator

Signature: 

Date: 9/1/2023

email: garrett.green@exxonmobil.com

Telephone: 575-200-0729

OCD Only

Received by: Shelly Wells

Date: 9/7/2023

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____



APPENDIX B

Photographic Log



Photographic Log

XTO Energy, Inc

Poker Lake Unit #420 Battery

Incident Number NAB1834656162



Photograph 1

Date: 3/13/2023

Description: Well monument

View: Northwest



Photograph 2

Date: 3/21/2023

Description: Excavation extent after first day

View: North-Northeast



Photograph 3

Date: 3/24/2023

Description: Excavation of northern and central areas

View: South



Photograph 4

Date: 4/26/2023

Description: Excavation of southern area

View: West



APPENDIX C

Laboratory Analytical Reports & Chain of Custody Documentation



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/4/2023 12:33:17 PM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4392-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad

Job Notes

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

Authorization



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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4392-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Qualifiers

GC VOA

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Job ID: 890-4392-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4392-1****Receipt**

The samples were received on 3/23/2023 8:03 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 2.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH10A (890-4392-1) and FS07A (890-4392-2).

GC VOA

Method 8021B: The matrix spike (MS) recoveries for preparation batch 880-49808 and analytical batch 880-50000 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-49712 and analytical batch 880-49689 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-49712/2-A) and (LCSD 880-49712/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: (890-4387-A-7-B MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: An incorrect volume of spiking solution was inadvertently added to the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) associated with preparation batch 880-49712 and analytical batch 880-49689. MS/MSD will show recovery for the batch.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50166 and analytical batch 880-50311 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. PH10A (890-4392-1), FS07A (890-4392-2), (890-4392-A-1-E MS) and (890-4392-A-1-F MSD)

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

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Client Sample ID: PH10A

Lab Sample ID: 890-4392-1

Date Collected: 03/21/23 11:40

Matrix: Solid

Date Received: 03/23/23 08:03

Sample Depth: 1

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		03/29/23 10:19	04/01/23 14:40	1
Toluene	<0.00198	U	0.00198	mg/Kg		03/29/23 10:19	04/01/23 14:40	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		03/29/23 10:19	04/01/23 14:40	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		03/29/23 10:19	04/01/23 14:40	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		03/29/23 10:19	04/01/23 14:40	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		03/29/23 10:19	04/01/23 14:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	03/29/23 10:19	04/01/23 14:40	1
1,4-Difluorobenzene (Surr)	90		70 - 130	03/29/23 10:19	04/01/23 14:40	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			04/03/23 15:17	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			03/29/23 14:59	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		03/28/23 10:11	03/28/23 23:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/28/23 10:11	03/28/23 23:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/28/23 10:11	03/28/23 23:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	112		70 - 130	03/28/23 10:11	03/28/23 23:52	1
o-Terphenyl	127		70 - 130	03/28/23 10:11	03/28/23 23:52	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	255	F1	4.99	mg/Kg			04/03/23 20:16	1

Client Sample ID: FS07A

Lab Sample ID: 890-4392-2

Date Collected: 03/22/23 14:30

Matrix: Solid

Date Received: 03/23/23 08:03

Sample Depth: 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		03/29/23 16:20	04/03/23 20:16	1
Toluene	<0.00201	U	0.00201	mg/Kg		03/29/23 16:20	04/03/23 20:16	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		03/29/23 16:20	04/03/23 20:16	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		03/29/23 16:20	04/03/23 20:16	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		03/29/23 16:20	04/03/23 20:16	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		03/29/23 16:20	04/03/23 20:16	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	03/29/23 16:20	04/03/23 20:16	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Client Sample ID: FS07A

Lab Sample ID: 890-4392-2

Date Collected: 03/22/23 14:30

Matrix: Solid

Date Received: 03/23/23 08:03

Sample Depth: 3

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	106		70 - 130	03/29/23 16:20	04/03/23 20:16	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/04/23 10:23	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			03/29/23 14:59	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		03/28/23 10:11	03/29/23 00:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U **	49.9	mg/Kg		03/28/23 10:11	03/29/23 00:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/28/23 10:11	03/29/23 00:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	111		70 - 130	03/28/23 10:11	03/29/23 00:14	1
o-Terphenyl	131	S1+	70 - 130	03/28/23 10:11	03/29/23 00:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	106		4.97	mg/Kg			04/03/23 20:29	1

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26264-A-1-E MS	Matrix Spike	97	111
880-26264-A-1-F MSD	Matrix Spike Duplicate	96	108
890-4381-A-1-B MS	Matrix Spike	113	89
890-4381-A-1-C MSD	Matrix Spike Duplicate	113	84
890-4392-1	PH10A	104	90
890-4392-2	FS07A	98	106
LCS 880-49808/1-A	Lab Control Sample	104	88
LCS 880-49883/1-A	Lab Control Sample	97	109
LCSD 880-49808/2-A	Lab Control Sample Dup	110	88
LCSD 880-49883/2-A	Lab Control Sample Dup	97	113
MB 880-49808/5-A	Method Blank	100	81
MB 880-49883/5-B	Method Blank	90	97
MB 880-49933/5-A	Method Blank	103	79
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4387-A-7-B MS	Matrix Spike	127	135 S1+
890-4387-A-7-C MSD	Matrix Spike Duplicate	116	123
890-4392-1	PH10A	112	127
890-4392-2	FS07A	111	131 S1+
LCS 880-49712/2-A	Lab Control Sample	139 S1+	165 S1+
LCSD 880-49712/3-A	Lab Control Sample Dup	127	149 S1+
MB 880-49712/1-A	Method Blank	124	153 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49808/5-A

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49808

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:19	04/01/23 09:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:19	04/01/23 09:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:19	04/01/23 09:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 10:19	04/01/23 09:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 10:19	04/01/23 09:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 10:19	04/01/23 09:47	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	03/29/23 10:19	04/01/23 09:47	1
1,2-Dichlorobenzene (Surr)	1		70 - 130	03/29/23 10:19	04/01/23 09:47	1

Lab Sample ID: LCS 880-49808/1-A

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49808

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08736		mg/Kg		87	70 - 130
Toluene	0.100	0.09251		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.08844		mg/Kg		88	70 - 130
m-Xylene & p-Xylene	0.200	0.1836		mg/Kg		92	70 - 130
o-Xylene	0.100	0.09446		mg/Kg		94	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,2-Dichlorobenzene (Surr)	1		70 - 130

Lab Sample ID: LCSD 880-49808/2-A

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49808

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08999		mg/Kg		90	70 - 130	3	35
Toluene	0.100	0.09676		mg/Kg		97	70 - 130	4	35
Ethylbenzene	0.100	0.09340		mg/Kg		93	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1958		mg/Kg		98	70 - 130	6	35
o-Xylene	0.100	0.1015		mg/Kg		102	70 - 130	7	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,2-Dichlorobenzene (Surr)	1		70 - 130

Lab Sample ID: 890-4381-A-1-B MS

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U F1	0.0998	0.06102	F1	mg/Kg		61	70 - 130
Toluene	<0.00198	U F1	0.0998	0.06854	F1	mg/Kg		69	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

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

Lab Sample ID: 890-4381-A-1-B MS

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49808

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00198	U	0.0998	0.06969		mg/Kg		70	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1467		mg/Kg		73	70 - 130
o-Xylene	<0.00198	U	0.0998	0.07643		mg/Kg		77	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichlorobenzene (Surr)	9		70 - 130

Lab Sample ID: 890-4381-A-1-C MSD

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49808

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U F1	0.100	0.07589		mg/Kg		75	70 - 130	22	35
Toluene	<0.00198	U F1	0.100	0.08530		mg/Kg		85	70 - 130	22	35
Ethylbenzene	<0.00198	U	0.100	0.08427		mg/Kg		84	70 - 130	19	35
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1753		mg/Kg		87	70 - 130	18	35
o-Xylene	<0.00198	U	0.100	0.09052		mg/Kg		90	70 - 130	17	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,2-Dichlorobenzene (Surr)	4		70 - 130

Lab Sample ID: MB 880-49883/5-B

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49883

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 16:20	04/03/23 11:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 16:20	04/03/23 11:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 16:20	04/03/23 11:48	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 16:20	04/03/23 11:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 16:20	04/03/23 11:48	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 16:20	04/03/23 11:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	03/29/23 1h:20	04/03/23 11:4	1
1,2-Dichlorobenzene (Surr)	97		70 - 130	03/29/23 1h:20	04/03/23 11:4	1

Lab Sample ID: LCS 880-49883/1-A

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.08870		mg/Kg		89	70 - 130
Toluene	0.100	0.08620		mg/Kg		86	70 - 130
Ethylbenzene	0.100	0.07860		mg/Kg		79	70 - 130
m-Xylene & p-Xylene	0.200	0.1546		mg/Kg		77	70 - 130

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

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

Lab Sample ID: LCS 880-49883/1-A

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49883

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	0.100	0.07966		mg/Kg		80	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,2-Dichlorobenzene (Surr)	109		70 - 130

Lab Sample ID: LCSD 880-49883/2-A

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49883

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.09479		mg/Kg		95	70 - 130	7	35
Toluene	0.100	0.09119		mg/Kg		91	70 - 130	6	35
Ethylbenzene	0.100	0.08287		mg/Kg		83	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130	5	35
o-Xylene	0.100	0.08296		mg/Kg		83	70 - 130	4	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,2-Dichlorobenzene (Surr)	113		70 - 130

Lab Sample ID: 880-26264-A-1-E MS

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49883

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.09229		mg/Kg		92	70 - 130
Toluene	<0.00198	U	0.0998	0.08763		mg/Kg		88	70 - 130
Ethylbenzene	<0.00198	U	0.0998	0.07830		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1529		mg/Kg		77	70 - 130
o-Xylene	<0.00198	U	0.0998	0.07819		mg/Kg		78	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	97		70 - 130
1,2-Dichlorobenzene (Surr)	111		70 - 130

Lab Sample ID: 880-26264-A-1-F MSD

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49883

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.101	0.08391		mg/Kg		83	70 - 130	10	35
Toluene	<0.00198	U	0.101	0.08083		mg/Kg		80	70 - 130	8	35
Ethylbenzene	<0.00198	U	0.101	0.07240		mg/Kg		72	70 - 130	8	35
m-Xylene & p-Xylene	<0.00396	U	0.202	0.1415		mg/Kg		70	70 - 130	8	35
o-Xylene	<0.00198	U	0.101	0.07191		mg/Kg		71	70 - 130	8	35

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

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

Lab Sample ID: 880-26264-A-1-F MSD

Matrix: Solid

Analysis Batch: 50103

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49883

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	9h		70 - 130
1,2-Difluorobenzene (Surr)	10,		70 - 130

Lab Sample ID: MB 880-49933/5-A

Matrix: Solid

Analysis Batch: 50000

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49933

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
Toluene	<0.00200	U	0.00200	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/30/23 12:24	03/31/23 23:05	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			03/30/23 12:24	03/31/23 23:0c	1	
1,2-Difluorobenzene (Surr)	79		70 - 130			03/30/23 12:24	03/31/23 23:0c	1	

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

Lab Sample ID: MB 880-49712/1-A

Matrix: Solid

Analysis Batch: 49689

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49712

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/28/23 10:11	03/28/23 21:43	1	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/28/23 10:11	03/28/23 21:43	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/28/23 10:11	03/28/23 21:43	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil	Fac
1-trimethylbenzene	124		70 - 130			03/2, /23 10:11	03/2, /23 21:43	1	
o-xylene	1c3	S1p	70 - 130			03/2, /23 10:11	03/2, /23 21:43	1	

Lab Sample ID: LCS 880-49712/2-A

Matrix: Solid

Analysis Batch: 49689

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49712

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	1000	1940	*+	mg/Kg		194	70 - 130		
Diesel Range Organics (Over C10-C28)	1000	2086	*+	mg/Kg		209	70 - 130		
Surrogate	%Recovery	Qualifier	Limits						
1-trimethylbenzene	139	S1p	70 - 130						
o-xylene	1hc	S1p	70 - 130						

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

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

Lab Sample ID: LCSD 880-49712/3-A

Matrix: Solid

Analysis Batch: 49689

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49712

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1829	*+	mg/Kg		183	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	1000	1842	*+	mg/Kg		184	70 - 130	12	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
1-t aloroo85Tne	127		70 - 130						
o-yer6aen+I	149	S1p	70 - 130						

Lab Sample ID: 890-4387-A-7-B MS

Matrix: Solid

Analysis Batch: 49689

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49712

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec		
	Result	Qualifier	Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+	998	1168		mg/Kg		114	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U *+	998	1219		mg/Kg		120	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
1-t aloroo85Tne	127		70 - 130								
o-ver6aen+I	13c	S1p	70 - 130								

Lab Sample ID: 890-4387-A-7-C MSD

Matrix: Solid

Analysis Batch: 49689

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49712

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *+	999	1099		mg/Kg		107	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<49.9	U *+	999	1195		mg/Kg		118	70 - 130	2	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50166/1-A

Matrix: Solid

Analysis Batch: 50311

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/03/23 20:02	1

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50166/2-A				Client Sample ID: Lab Control Sample							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50311											
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	236.3		mg/Kg		95	90 - 110		

Lab Sample ID: LCSD 880-50166/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50311											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride			250	240.7		mg/Kg		96	90 - 110	2	20

Lab Sample ID: 890-4392-1 MS				Client Sample ID: PH10A							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50311											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	255	F1	250	434.2	F1	mg/Kg		72	90 - 110		

Lab Sample ID: 890-4392-1 MSD				Client Sample ID: PH10A							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50311											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	255	F1	250	437.0	F1	mg/Kg		73	90 - 110	1	20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

GC VOA

Prep Batch: 49808

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	5035	
MB 880-49808/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-49808/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49808/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4381-A-1-B MS	Matrix Spike	Total/NA	Solid	5035	
890-4381-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 49883

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-2	FS07A	Total/NA	Solid	5035	
MB 880-49883/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-49883/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-49883/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26264-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-26264-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 49933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49933/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 50000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	8021B	49808
MB 880-49808/5-A	Method Blank	Total/NA	Solid	8021B	49808
MB 880-49933/5-A	Method Blank	Total/NA	Solid	8021B	49933
LCS 880-49808/1-A	Lab Control Sample	Total/NA	Solid	8021B	49808
LCSD 880-49808/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49808
890-4381-A-1-B MS	Matrix Spike	Total/NA	Solid	8021B	49808
890-4381-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49808

Analysis Batch: 50103

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-2	FS07A	Total/NA	Solid	8021B	49883
MB 880-49883/5-B	Method Blank	Total/NA	Solid	8021B	49883
LCS 880-49883/1-A	Lab Control Sample	Total/NA	Solid	8021B	49883
LCSD 880-49883/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	49883
880-26264-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	49883
880-26264-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	49883

Analysis Batch: 50223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	Total BTEX	
890-4392-2	FS07A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 49689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	8015B NM	49712
890-4392-2	FS07A	Total/NA	Solid	8015B NM	49712
MB 880-49712/1-A	Method Blank	Total/NA	Solid	8015B NM	49712

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

GC Semi VOA (Continued)

Analysis Batch: 49689 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-49712/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49712
LCSD 880-49712/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49712
890-4387-A-7-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49712
890-4387-A-7-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49712

Prep Batch: 49712

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	8015NM Prep	
890-4392-2	FS07A	Total/NA	Solid	8015NM Prep	
MB 880-49712/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49712/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49712/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4387-A-7-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4387-A-7-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49857

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Total/NA	Solid	8015 NM	
890-4392-2	FS07A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Soluble	Solid	DI Leach	
890-4392-2	FS07A	Soluble	Solid	DI Leach	
MB 880-50166/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50166/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50166/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4392-1 MS	PH10A	Soluble	Solid	DI Leach	
890-4392-1 MSD	PH10A	Soluble	Solid	DI Leach	

Analysis Batch: 50311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4392-1	PH10A	Soluble	Solid	300.0	50166
890-4392-2	FS07A	Soluble	Solid	300.0	50166
MB 880-50166/1-A	Method Blank	Soluble	Solid	300.0	50166
LCS 880-50166/2-A	Lab Control Sample	Soluble	Solid	300.0	50166
LCSD 880-50166/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50166
890-4392-1 MS	PH10A	Soluble	Solid	300.0	50166
890-4392-1 MSD	PH10A	Soluble	Solid	300.0	50166

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

Client Sample ID: PH10A
Date Collected: 03/21/23 11:40
Date Received: 03/23/23 08:03

Lab Sample ID: 890-4392-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	49808	03/29/23 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50000	04/01/23 14:40	SM	EET MID
Total/NA	Analysis	Total BTEX		1			50223	04/03/23 15:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			49857	03/29/23 14:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	49712	03/28/23 10:11	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49689	03/28/23 23:52	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	50166	04/03/23 11:04	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50311	04/03/23 20:16	SMC	EET MID

Client Sample ID: FS07A
Date Collected: 03/22/23 14:30
Date Received: 03/23/23 08:03

Lab Sample ID: 890-4392-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	49883	03/29/23 16:20	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	50103	04/03/23 20:16	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			50223	04/04/23 10:23	SM	EET MID
Total/NA	Analysis	8015 NM		1			49857	03/29/23 14:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	49712	03/28/23 10:11	AM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	49689	03/29/23 00:14	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	50166	04/03/23 11:04	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	50311	04/03/23 20:29	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 420H

Job ID: 890-4392-1
SDG: 03C1558196

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-25	06-30-23

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

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

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

Method Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4392-1
SDG: 03C1558196

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 420H

Job ID: 890-4392-1
SDG: 03C1558196

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4392-1	PH10A	Solid	03/21/23 11:40	03/23/23 08:03	1
890-4392-2	FS07A	Solid	03/22/23 14:30	03/23/23 08:03	3

- 1
- 2
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- 10
- 11
- 12
- 13
- 14



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) 392-7350, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page _____ of _____

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	03C1558196	Due Date:			
Project Location:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:					
PO #:		Temp Blank:	☒ Yes ☐ No	Well Ice:	☒ Yes ☐ No
SAMPLE RECEIPT		Samples Received Intact:	☒ Yes ☐ No	Thermometer ID:	NM007
Cooler Custody Seals:	Yes	Correction Factor:			-0.2
Sample Custody Seals:	Yes	Temperature Reading:			2.8
Total Containers:	Yes	Corrected Temperature:			2.4
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp
PH10A	S	3/21/23	11:40	1'	G
FS07A	S	3/22/23	2:30	3'	C
Parameters					
CHLORIDES (EPA: 3000.0)					
TPH (8015)					
BTEX (8021)					
ANALYSIS REQUEST					
Preservative Codes					
None	NO	DI Water	H ₂ O		
Cool	Cool	MeOH	Me		
HCL	HC	HNO ₃	HN		
H ₂ SO ₄	H ₂	NaOH	Na		
H ₃ PO ₄	HP				
NaHSO ₄	NABIS				
Na ₂ S ₂ O ₃	NaSO ₃				
Zn Acetate	+NaOH	Zn			
NaOH+Ascorbic Acid	SAPC				
Sample Comments					
Incident ID:					
nAB1834656162					
Cost Center:					
1139851001					
A/E:					
PA 2022 04878 EXP 01					



890-4392 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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>CWH</i>	<i>AGM</i>	03/23/23 0743	<i>AGM</i>	<i>CWH</i>	3:23:23 803

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4392-1

SDG Number: 03C1558196

Login Number: 4392

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4392-1

SDG Number: 03C1558196

Login Number: 4392

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 03/24/23 11:08 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/6/2023 11:09:04 AM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4403-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
4/6/2023 11:09:04 AM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4403-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Job ID: 890-4403-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4403-1

Receipt

The samples were received on 3/23/2023 4:56 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: FS05A (890-4403-1), FS08A (890-4403-2), FS09A (890-4403-3), FS14A (890-4403-4), FS15A (890-4403-5), SW12 (890-4403-6), SW13 (890-4403-7), SW14 (890-4403-8), SW15 (890-4403-9), FS16 (890-4403-10), FS17 (890-4403-11), FS18 (890-4403-12), FS19 (890-4403-13) and FS20 (890-4403-14).

GC VOA

Method 8021B: The matrix spike duplicate (MSD) recoveries for preparation batch 880-50194 and analytical batch 880-50286 were outside control limits. Non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-49837 and analytical batch 880-49910 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-49837/2-A) and (LCSD 880-49837/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-49838 and analytical batch 880-49908 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-49908/5), (LCS 880-49838/2-A) and (LCSD 880-49838/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: The method blank for preparation batch 880-49838 and analytical batch 880-49908 contained Diesel Range Organics (Over C10-C28) and Oil Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50166 and analytical batch 880-50311 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. FS05A (890-4403-1), FS08A (890-4403-2), FS09A (890-4403-3), FS14A (890-4403-4), FS15A (890-4403-5) and SW12 (890-4403-6)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50166 and 880-50166 and analytical batch 880-50311 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. SW13 (890-4403-7), SW14 (890-4403-8), SW15 (890-4403-9), FS16 (890-4403-10), FS17 (890-4403-11), FS18 (890-4403-12), FS19 (890-4403-13), FS20 (890-4403-14), (890-4403-A-7-C MS) and (890-4403-A-7-D MSD)

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

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS05A

Lab Sample ID: 890-4403-1

Date Collected: 03/23/23 10:15

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 10:36	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 10:36	1
Ethylbenzene	<0.00201	U F1	0.00201	mg/Kg		04/03/23 13:19	04/05/23 10:36	1
m-Xylene & p-Xylene	<0.00402	U F1	0.00402	mg/Kg		04/03/23 13:19	04/05/23 10:36	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 10:36	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/03/23 13:19	04/05/23 10:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130	04/03/23 13:19	04/05/23 10:36	1
1,4-Difluorobenzene (Surr)	88		70 - 130	04/03/23 13:19	04/05/23 10:36	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/05/23 13:23	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			03/31/23 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	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 19:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 19:22	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 19:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	03/29/23 12:33	03/30/23 19:22	1
o-Terphenyl	102		70 - 130	03/29/23 12:33	03/30/23 19:22	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	171		5.00	mg/Kg			04/03/23 20:43	1

Client Sample ID: FS08A

Lab Sample ID: 890-4403-2

Date Collected: 03/23/23 10:20

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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		04/03/23 13:19	04/05/23 15:28	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 15:28	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 15:28	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		04/03/23 13:19	04/05/23 15:28	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 15:28	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		04/03/23 13:19	04/05/23 15:28	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130	04/03/23 13:19	04/05/23 15:28	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS08A

Lab Sample ID: 890-4403-2

Date Collected: 03/23/23 10:20

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130	04/03/23 13:19	04/05/23 15:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			04/05/23 17:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/31/23 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	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 19:44	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 19:44	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 19:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			03/29/23 12:33	03/30/23 19:44	1
o-Terphenyl	88		70 - 130			03/29/23 12:33	03/30/23 19:44	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	183		5.02	mg/Kg			04/03/23 20:57	1

Client Sample ID: FS09A

Lab Sample ID: 890-4403-3

Date Collected: 03/23/23 10:25

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 15:49	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 15:49	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 15:49	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 15:49	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 15:49	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 15:49	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130	04/03/23 13:19	04/05/23 15:49	1
1,4-Difluorobenzene (Surr)	94		70 - 130	04/03/23 13:19	04/05/23 15:49	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			04/05/23 17:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/31/23 10:55	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS09A

Lab Sample ID: 890-4403-3

Date Collected: 03/23/23 10:25

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:06	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:06	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			03/29/23 12:33	03/30/23 20:06	1
o-Terphenyl	104		70 - 130			03/29/23 12:33	03/30/23 20:06	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	244		5.03	mg/Kg			04/03/23 21:01	1

Client Sample ID: FS14A

Lab Sample ID: 890-4403-4

Date Collected: 03/23/23 11:00

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 16:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			04/03/23 13:19	04/05/23 16:09	1
1,4-Difluorobenzene (Surr)	97		70 - 130			04/03/23 13:19	04/05/23 16:09	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/05/23 17:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			03/31/23 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	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 20:27	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 20:27	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		03/29/23 12:33	03/30/23 20:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			03/29/23 12:33	03/30/23 20:27	1
o-Terphenyl	87		70 - 130			03/29/23 12:33	03/30/23 20:27	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS14A

Lab Sample ID: 890-4403-4

Date Collected: 03/23/23 11:00

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	227		5.02	mg/Kg			04/03/23 21:06	1

Client Sample ID: FS15A

Lab Sample ID: 890-4403-5

Date Collected: 03/23/23 11:05

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/03/23 13:19	04/05/23 16:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			04/03/23 13:19	04/05/23 16:30	1
1,4-Difluorobenzene (Surr)	95		70 - 130			04/03/23 13:19	04/05/23 16:30	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			04/06/23 11:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/31/23 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	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:49	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 20:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			03/29/23 12:33	03/30/23 20:49	1
o-Terphenyl	101		70 - 130			03/29/23 12:33	03/30/23 20:49	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	500		4.97	mg/Kg			04/03/23 21:10	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: SW12

Lab Sample ID: 890-4403-6

Date Collected: 03/23/23 12:45

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 16:51	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 16:51	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 16:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/03/23 13:19	04/05/23 16:51	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 16:51	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/03/23 13:19	04/05/23 16:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130	04/03/23 13:19	04/05/23 16:51	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/03/23 13:19	04/05/23 16:51	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/06/23 11:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	162		49.9	mg/Kg			03/31/23 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	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 21:11	1
Diesel Range Organics (Over C10-C28)	162		49.9	mg/Kg		03/29/23 12:33	03/30/23 21:11	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 21:11	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	94		70 - 130	03/29/23 12:33	03/30/23 21:11	1
o-Terphenyl	85		70 - 130	03/29/23 12:33	03/30/23 21:11	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	598		4.96	mg/Kg			04/03/23 21:15	1

Client Sample ID: SW13

Lab Sample ID: 890-4403-7

Date Collected: 03/23/23 12:50

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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		04/03/23 13:19	04/05/23 17:12	1
Toluene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 17:12	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 17:12	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		04/03/23 13:19	04/05/23 17:12	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		04/03/23 13:19	04/05/23 17:12	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		04/03/23 13:19	04/05/23 17:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	04/03/23 13:19	04/05/23 17:12	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: SW13

Lab Sample ID: 890-4403-7

Date Collected: 03/23/23 12:50

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	95		70 - 130	04/03/23 13:19	04/05/23 17:12	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			04/06/23 11:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	78.9		49.9	mg/Kg			03/31/23 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	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 21:33	1
Diesel Range Organics (Over C10-C28)	78.9		49.9	mg/Kg		03/29/23 12:33	03/30/23 21:33	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:33	03/30/23 21:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			03/29/23 12:33	03/30/23 21:33	1
o-Terphenyl	97		70 - 130			03/29/23 12:33	03/30/23 21:33	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	156	F1	4.98	mg/Kg			04/03/23 21:19	1

Client Sample ID: SW14

Lab Sample ID: 890-4403-8

Date Collected: 03/23/23 12:55

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 17:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130			04/03/23 13:19	04/05/23 17:32	1
1,4-Difluorobenzene (Surr)	94		70 - 130			04/03/23 13:19	04/05/23 17:32	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/06/23 11:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/31/23 10:55	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: SW14

Lab Sample ID: 890-4403-8

Date Collected: 03/23/23 12:55

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 21:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 21:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	92		70 - 130			03/29/23 12:33	03/30/23 21:55	1
o-Terphenyl	81		70 - 130			03/29/23 12:33	03/30/23 21:55	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	334		5.04	mg/Kg			04/03/23 21:33	1

Client Sample ID: SW15

Lab Sample ID: 890-4403-9

Date Collected: 03/23/23 13:40

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 13:19	04/05/23 17:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			04/03/23 13:19	04/05/23 17:53	1
1,4-Difluorobenzene (Surr)	99		70 - 130			04/03/23 13:19	04/05/23 17:53	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/06/23 11:39	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			03/31/23 11:54	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		03/29/23 12:35	03/30/23 13:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 13:52	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 13:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130			03/29/23 12:35	03/30/23 13:52	1
o-Terphenyl	95		70 - 130			03/29/23 12:35	03/30/23 13:52	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: SW15

Lab Sample ID: 890-4403-9

Date Collected: 03/23/23 13:40

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 0-3'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	546		5.04	mg/Kg			04/03/23 21:37	1

Client Sample ID: FS16

Lab Sample ID: 890-4403-10

Date Collected: 03/23/23 14:10

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/03/23 13:19	04/05/23 18:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		70 - 130			04/03/23 13:19	04/05/23 18:14	1
1,4-Difluorobenzene (Surr)	93		70 - 130			04/03/23 13:19	04/05/23 18:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/06/23 11:39	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/31/23 11:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 14:58	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 14:58	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 14:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/29/23 12:35	03/30/23 14:58	1
o-Terphenyl	106		70 - 130			03/29/23 12:35	03/30/23 14:58	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	64.8		5.01	mg/Kg			04/03/23 21:51	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS17

Lab Sample ID: 890-4403-11

Date Collected: 03/23/23 14:15

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 13:41	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 13:41	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 13:41	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 13:41	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 13:41	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 13:41	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130	04/03/23 14:18	04/05/23 13:41	1
1,4-Difluorobenzene (Surr)	98		70 - 130	04/03/23 14:18	04/05/23 13:41	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/05/23 16:40	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			03/31/23 11:54	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		03/29/23 12:35	03/30/23 15:20	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 15:20	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 15:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	03/29/23 12:35	03/30/23 15:20	1
o-Terphenyl	107		70 - 130	03/29/23 12:35	03/30/23 15:20	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	265		4.97	mg/Kg			04/03/23 21:56	1

Client Sample ID: FS18

Lab Sample ID: 890-4403-12

Date Collected: 03/23/23 14:20

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 14:02	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 14:02	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 14:02	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/03/23 14:18	04/05/23 14:02	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 14:02	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/03/23 14:18	04/05/23 14:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130	04/03/23 14:18	04/05/23 14:02	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS18

Lab Sample ID: 890-4403-12

Date Collected: 03/23/23 14:20

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	90		70 - 130	04/03/23 14:18	04/05/23 14:02	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			04/05/23 16:40	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			03/31/23 11:54	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		03/29/23 12:35	03/30/23 15:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 15:42	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 15:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			03/29/23 12:35	03/30/23 15:42	1
o-Terphenyl	100		70 - 130			03/29/23 12:35	03/30/23 15:42	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	142		5.00	mg/Kg			04/03/23 22:00	1

Client Sample ID: FS19

Lab Sample ID: 890-4403-13

Date Collected: 03/23/23 14:25

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:22	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:22	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:22	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 14:22	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:22	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 14:22	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	04/03/23 14:18	04/05/23 14:22	1
1,4-Difluorobenzene (Surr)	75		70 - 130	04/03/23 14:18	04/05/23 14:22	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/05/23 16:40	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			03/31/23 11:54	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS19

Lab Sample ID: 890-4403-13

Date Collected: 03/23/23 14:25

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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		03/29/23 12:35	03/30/23 16:03	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 16:03	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		03/29/23 12:35	03/30/23 16:03	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130			03/29/23 12:35	03/30/23 16:03	1
o-Terphenyl	123		70 - 130			03/29/23 12:35	03/30/23 16:03	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	343		5.02	mg/Kg			04/03/23 22:05	1

Client Sample ID: FS20

Lab Sample ID: 890-4403-14

Date Collected: 03/23/23 14:30

Matrix: Solid

Date Received: 03/23/23 16:56

Sample Depth: 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/03/23 14:18	04/05/23 14:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			04/03/23 14:18	04/05/23 14:43	1
1,4-Difluorobenzene (Surr)	92		70 - 130			04/03/23 14:18	04/05/23 14:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/05/23 16:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			03/31/23 11:54	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 16:26	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 16:26	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 16:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			03/29/23 12:35	03/30/23 16:26	1
o-Terphenyl	107		70 - 130			03/29/23 12:35	03/30/23 16:26	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Client Sample ID: FS20
Date Collected: 03/23/23 14:30
Date Received: 03/23/23 16:56
Sample Depth: 3'

Lab Sample ID: 890-4403-14
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	93.6		5.04	mg/Kg			04/03/23 22:09	1	

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

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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)
880-26660-A-41-G MS	Matrix Spike	90	115
880-26660-A-41-H MSD	Matrix Spike Duplicate	91	115
890-4403-1	FS05A	92	88
890-4403-1 MS	FS05A	104	84
890-4403-1 MSD	FS05A	100	92
890-4403-2	FS08A	105	100
890-4403-3	FS09A	111	94
890-4403-4	FS14A	104	97
890-4403-5	FS15A	115	95
890-4403-6	SW12	108	98
890-4403-7	SW13	106	95
890-4403-8	SW14	104	94
890-4403-9	SW15	107	99
890-4403-10	FS16	111	93
890-4403-11	FS17	84	98
890-4403-12	FS18	91	90
890-4403-13	FS19	93	75
890-4403-14	FS20	89	92
LCS 880-50194/1-A	Lab Control Sample	111	103
LCS 880-50209/1-A	Lab Control Sample	107	114
LCSD 880-50194/2-A	Lab Control Sample Dup	97	90
LCSD 880-50209/2-A	Lab Control Sample Dup	86	118
MB 880-49835/5-A	Method Blank	78	94
MB 880-50194/5-A	Method Blank	96	79
MB 880-50207/5-A	Method Blank	97	79
MB 880-50209/5-A	Method Blank	69 S1-	97
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)
890-4399-A-4-B MS	Matrix Spike	119	86
890-4399-A-4-C MSD	Matrix Spike Duplicate	122	98
890-4403-1	FS05A	113	102
890-4403-2	FS08A	98	88
890-4403-3	FS09A	113	104
890-4403-4	FS14A	96	87
890-4403-5	FS15A	108	101
890-4403-6	SW12	94	85
890-4403-7	SW13	107	97
890-4403-8	SW14	92	81
890-4403-9	SW15	85	95
890-4403-9 MS	SW15	102	105
890-4403-9 MSD	SW15	100	104

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Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4403-10	FS16	89	106
890-4403-11	FS17	99	107
890-4403-12	FS18	89	100
890-4403-13	FS19	109	123
890-4403-14	FS20	90	107
LCS 880-49837/2-A	Lab Control Sample	147 S1+	121
LCS 880-49838/2-A	Lab Control Sample	122	149 S1+
LCSD 880-49837/3-A	Lab Control Sample Dup	145 S1+	122
LCSD 880-49838/3-A	Lab Control Sample Dup	120	143 S1+
MB 880-49837/1-A	Method Blank	151 S1+	142 S1+
MB 880-49838/1-A	Method Blank	120	141 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49835/5-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49835

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 12:18	04/04/23 21:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	10		17 - 3/ 7	7/ 29/23/ 39:30	742742/ 93:4,	3
3i4-Clfluorobenzene (Surr)	D4		17 - 3/ 7	7/ 29/23/ 39:30	742742/ 93:4,	3

Lab Sample ID: MB 880-50194/5-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50194

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 10:15	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 10:15	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 10:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/03/23 13:19	04/05/23 10:15	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 13:19	04/05/23 10:15	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/03/23 13:19	04/05/23 10:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	Dc		17 - 3/ 7	7427/ 29/ 3/:3D	7427/ 29/ 37:3,	3
3i4-Clfluorobenzene (Surr)	1D		17 - 3/ 7	7427/ 29/ 3/:3D	7427/ 29/ 37:3,	3

Lab Sample ID: LCS 880-50194/1-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50194

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1085		mg/Kg		108	70 - 130
Toluene	0.100	0.07990		mg/Kg		80	70 - 130
Ethylbenzene	0.100	0.07350		mg/Kg		74	70 - 130
m-Xylene & p-Xylene	0.200	0.1499		mg/Kg		75	70 - 130
o-Xylene	0.100	0.07534		mg/Kg		75	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	333		17 - 3/ 7
3i4-Clfluorobenzene (Surr)	37/		17 - 3/ 7

Lab Sample ID: LCSD 880-50194/2-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50194

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.09578		mg/Kg		96	70 - 130	12	35

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Lab Sample ID: LCSD 880-50194/2-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50194

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1006		mg/Kg		101	70 - 130	23	35
Ethylbenzene	0.100	0.09638		mg/Kg		96	70 - 130	27	35
m-Xylene & p-Xylene	0.200	0.1979		mg/Kg		99	70 - 130	28	35
o-Xylene	0.100	0.09849		mg/Kg		98	70 - 130	27	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	D1		17 - 3/ 7
3i4-Chlorobenzene (Surr)	D7		17 - 3/ 7

Lab Sample ID: 890-4403-1 MS

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: FS05A

Prep Type: Total/NA

Prep Batch: 50194

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U	0.100	0.07438		mg/Kg		74	70 - 130
Toluene	<0.00201	U	0.100	0.08192		mg/Kg		82	70 - 130
Ethylbenzene	<0.00201	U F1	0.100	0.07152		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	<0.00402	U F1	0.201	0.1530		mg/Kg		76	70 - 130
o-Xylene	<0.00201	U	0.100	0.08011		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	374		17 - 3/ 7
3i4-Chlorobenzene (Surr)	04		17 - 3/ 7

Lab Sample ID: 890-4403-1 MSD

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: FS05A

Prep Type: Total/NA

Prep Batch: 50194

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U	0.0990	0.07062		mg/Kg		71	70 - 130	5	35
Toluene	<0.00201	U	0.0990	0.07447		mg/Kg		75	70 - 130	10	35
Ethylbenzene	<0.00201	U F1	0.0990	0.06468	F1	mg/Kg		65	70 - 130	10	35
m-Xylene & p-Xylene	<0.00402	U F1	0.198	0.1366	F1	mg/Kg		69	70 - 130	11	35
o-Xylene	<0.00201	U	0.0990	0.07215		mg/Kg		73	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	377		17 - 3/ 7
3i4-Chlorobenzene (Surr)	D9		17 - 3/ 7

Lab Sample ID: MB 880-50207/5-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50207

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:15	04/04/23 22:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:15	04/04/23 22:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:15	04/04/23 22:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/03/23 14:15	04/04/23 22:31	1

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Lab Sample ID: MB 880-50207/5-A

Matrix: Solid

Analysis Batch: 50286

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50207

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:15	04/04/23 22:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/03/23 14:15	04/04/23 22:31	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	D1		17 - 3/ 7			742/ 29/ 34:3	742/ 429/ 99:/ 3	3
3i4-Chlorobenzene (Surr)	1D		17 - 3/ 7			742/ 29/ 34:3	742/ 429/ 99:/ 3	3

Lab Sample ID: MB 880-50209/5-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50209

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	cD	S3-	17 - 3/ 7			742/ 29/ 34:30	742/ 29/ 70:/ 9	3
3i4-Chlorobenzene (Surr)	D1		17 - 3/ 7			742/ 29/ 34:30	742/ 29/ 70:/ 9	3

Lab Sample ID: LCS 880-50209/1-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1027		mg/Kg		103	70 - 130
Toluene	0.100	0.09639		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09214		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1893		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09706		mg/Kg		97	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
4-Bromofluorobenzene (Surr)	371		17 - 3/ 7				
3i4-Chlorobenzene (Surr)	334		17 - 3/ 7				

Lab Sample ID: LCSD 880-50209/2-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	0.100	0.1069		mg/Kg		107	70 - 130	4	35
Toluene	0.100	0.08523		mg/Kg		85	70 - 130	12	35
Ethylbenzene	0.100	0.07724		mg/Kg		77	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.1525		mg/Kg		76	70 - 130	22	35
o-Xylene	0.100	0.07833		mg/Kg		78	70 - 130	21	35

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	0c		17 - 3/ 7
3i4-Chlorobenzene (Surr)	330		17 - 3/ 7

Lab Sample ID: 880-26660-A-41-G MS

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00200	U	0.101	0.07591		mg/Kg		75	70 - 130
Toluene	<0.00200	U F1	0.101	0.05996	F1	mg/Kg		59	70 - 130
Ethylbenzene	<0.00200	U F1	0.101	0.05439	F1	mg/Kg		54	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1	0.202	0.1044	F1	mg/Kg		52	70 - 130
o-Xylene	<0.00200	U F1	0.101	0.05458	F1	mg/Kg		54	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	D7		17 - 3/ 7
3i4-Chlorobenzene (Surr)	33,		17 - 3/ 7

Lab Sample ID: 880-26660-A-41-H MSD

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	<0.00200	U	0.0990	0.08160		mg/Kg		82	70 - 130	7	35
Toluene	<0.00200	U F1	0.0990	0.06472	F1	mg/Kg		65	70 - 130	8	35
Ethylbenzene	<0.00200	U F1	0.0990	0.05818	F1	mg/Kg		59	70 - 130	7	35
m-Xylene & p-Xylene	<0.00399	U F1	0.198	0.1122	F1	mg/Kg		57	70 - 130	7	35
o-Xylene	<0.00200	U F1	0.0990	0.05803	F1	mg/Kg		59	70 - 130	6	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	D3		17 - 3/ 7
3i4-Chlorobenzene (Surr)	33,		17 - 3/ 7

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

Lab Sample ID: MB 880-49837/1-A

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49837

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 10:42	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 10:42	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:33	03/30/23 10:42	1

	MB	MB						
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac		
3-t aloroo85Tne	3, 3	S3p	17 - 3/ 7	7/ 2023/ 39:11	7/ 2723/ 37:49	3		
o-ye76aen+I	349	S3p	17 - 3/ 7	7/ 2023/ 39:11	7/ 2723/ 37:49	3		

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Lab Sample ID: LCS 880-49837/2-A

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49837

Analyte			Spike	LCS	LCS	Unit	D	%Rec	%Rec		
			Added	Result	Qualifier			Limits			
Gasoline Range Organics (GRO)-C6-C10			1000	885.9		mg/Kg		89	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	952.0		mg/Kg		95	70 - 130		

Lab Sample ID: LCSD 880-49837/3-A

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49837

			Spike	LCSD	LCSD				%Rec			RPD
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10			1000	941.1		mg/Kg		94	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)			1000	947.3		mg/Kg		95	70 - 130	1	20	
			LCSD	LCSD								
Surrogate	%Recovery	Qualifier	Limits									
3-t aloroo85Tne	34	S3p	17 - 3/ 7									
o-yer6aen+I	399		17 - 3/ 7									

Lab Sample ID: 890-4399-A-4-B MS

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 49837

	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	997	1119		mg/Kg		109	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U	997	1059		mg/Kg		106	70 - 130		
Surrogate	MS %Recovery	MS Qualifier	Limits								
3-t aloroo85Tne	33D		17 - 3/ 7								
o-yer6aen+I	0c		17 - 3/ 7								

Lab Sample ID: 890-4399-A-4-C MSD

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49837

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1103		mg/Kg		107	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	1174		mg/Kg		117	70 - 130	10	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
3-t aloroo85Tne	399		17 - 3/ 7								

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Lab Sample ID: 890-4399-A-4-C MSD

Matrix: Solid

Analysis Batch: 49910

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 49837

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
<i>o-yer6aen+I</i>	D0		17 - 3/ 7

Lab Sample ID: MB 880-49838/1-A

Matrix: Solid

Analysis Batch: 49908

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49838

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		03/29/23 12:35	03/30/23 08:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 08:23	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/29/23 12:35	03/30/23 08:23	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
%Recovery	Qualifier					
<i>3-t aloroo85Tne</i>	397		17 - 3/ 7	7/ 29/23/ 39:/	7/ 2 7/23/ 70:9/	3
<i>o-yer6aen+I</i>	343	S3p	17 - 3/ 7	7/ 29/23/ 39:/	7/ 2 7/23/ 70:9/	3

Lab Sample ID: LCS 880-49838/2-A

Matrix: Solid

Analysis Batch: 49908

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 49838

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	856.5		mg/Kg		86	70 - 130
Diesel Range Organics (Over C10-C28)	1000	885.5		mg/Kg		89	70 - 130

Surrogate	LCS	LCS	Limits
%Recovery	Qualifier		
<i>3-t aloroo85Tne</i>	399		17 - 3/ 7
<i>o-yer6aen+I</i>	34D	S3p	17 - 3/ 7

Lab Sample ID: LCSD 880-49838/3-A

Matrix: Solid

Analysis Batch: 49908

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 49838

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	870.2		mg/Kg		87	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	1000	886.2		mg/Kg		89	70 - 130	0	20

Surrogate	LCSD	LCSD	Limits
%Recovery	Qualifier		
<i>3-t aloroo85Tne</i>	397		17 - 3/ 7
<i>o-yer6aen+I</i>	34/	S3p	17 - 3/ 7

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

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

Lab Sample ID: 890-4403-9 MS

Matrix: Solid

Analysis Batch: 49908

Client Sample ID: SW15

Prep Type: Total/NA

Prep Batch: 49838

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	978.3		mg/Kg		96	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U	998	1132		mg/Kg		112	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
3-t aloroo85Tne	379		17 - 3/ 7						
o-yer6aen+I	37,		17 - 3/ 7						

Lab Sample ID: 890-4403-9 MSD

Matrix: Solid

Analysis Batch: 49908

Client Sample ID: SW15

Prep Type: Total/NA

Prep Batch: 49838

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	965.1		mg/Kg		94	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1122		mg/Kg		111	70 - 130	1	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
3-t aloroo85Tne	377		17 - 3/ 7								
o-yer6aen+I	374		17 - 3/ 7								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50166/1-A

Matrix: Solid

Analysis Batch: 50311

Client Sample ID: Method Blank

Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			04/03/23 20:02	1

Lab Sample ID: LCS 880-50166/2-A

Matrix: Solid

Analysis Batch: 50311

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	236.3		mg/Kg		95	90 - 110

Lab Sample ID: LCSD 880-50166/3-A

Matrix: Solid

Analysis Batch: 50311

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	250	240.7		mg/Kg		96	90 - 110	2	20

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-4403-7 MS										Client Sample ID: SW13		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 50311												
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	156	F1	249	363.3	F1	mg/Kg		83	90 - 110			

Lab Sample ID: 890-4403-7 MSD										Client Sample ID: SW13		
Matrix: Solid										Prep Type: Soluble		
Analysis Batch: 50311												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	156	F1	249	364.2	F1	mg/Kg		84	90 - 110	0	20	

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

GC VOA

Prep Batch: 4980L

bal Sample ID	Client Sample ID	Prep Myp	x atrid	x etho3	Prep Batch
MB 880-49835/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: L5194

bal Sample ID	Client Sample ID	Prep Myp	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	5035	
890-4403-2	FS08A	Total/NA	Solid	5035	
890-4403-3	FS09A	Total/NA	Solid	5035	
890-4403-4	FS14A	Total/NA	Solid	5035	
890-4403-5	FS15A	Total/NA	Solid	5035	
890-4403-6	SW12	Total/NA	Solid	5035	
890-4403-7	SW13	Total/NA	Solid	5035	
890-4403-8	SW14	Total/NA	Solid	5035	
890-4403-9	SW15	Total/NA	Solid	5035	
890-4403-10	FS16	Total/NA	Solid	5035	
MB 880-50194/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50194/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50194/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4403-1 MS	FS05A	Total/NA	Solid	5035	
890-4403-1 MSD	FS05A	Total/NA	Solid	5035	

Prep Batch: L5256

bal Sample ID	Client Sample ID	Prep Myp	x atrid	x etho3	Prep Batch
MB 880-50207/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: L5259

bal Sample ID	Client Sample ID	Prep Myp	x atrid	x etho3	Prep Batch
890-4403-11	FS17	Total/NA	Solid	5035	
890-4403-12	FS18	Total/NA	Solid	5035	
890-4403-13	FS19	Total/NA	Solid	5035	
890-4403-14	FS20	Total/NA	Solid	5035	
MB 880-50209/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50209/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50209/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26660-A-41-G MS	Matrix Spike	Total/NA	Solid	5035	
880-26660-A-41-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: L528L

bal Sample ID	Client Sample ID	Prep Myp	x atrid	x etho3	Prep Batch
890-4403-11	FS17	Total/NA	Solid	8021B	50209
890-4403-12	FS18	Total/NA	Solid	8021B	50209
890-4403-13	FS19	Total/NA	Solid	8021B	50209
890-4403-14	FS20	Total/NA	Solid	8021B	50209
MB 880-49835/5-A	Method Blank	Total/NA	Solid	8021B	49835
MB 880-50209/5-A	Method Blank	Total/NA	Solid	8021B	50209
LCS 880-50209/1-A	Lab Control Sample	Total/NA	Solid	8021B	50209
LCSD 880-50209/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50209
880-26660-A-41-G MS	Matrix Spike	Total/NA	Solid	8021B	50209
880-26660-A-41-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	50209

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

GC VOA

Analysis Batch: L528(

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	8021B	50194
890-4403-2	FS08A	Total/NA	Solid	8021B	50194
890-4403-3	FS09A	Total/NA	Solid	8021B	50194
890-4403-4	FS14A	Total/NA	Solid	8021B	50194
890-4403-5	FS15A	Total/NA	Solid	8021B	50194
890-4403-6	SW12	Total/NA	Solid	8021B	50194
890-4403-7	SW13	Total/NA	Solid	8021B	50194
890-4403-8	SW14	Total/NA	Solid	8021B	50194
890-4403-9	SW15	Total/NA	Solid	8021B	50194
890-4403-10	FS16	Total/NA	Solid	8021B	50194
MB 880-50194/5-A	Method Blank	Total/NA	Solid	8021B	50194
MB 880-50207/5-A	Method Blank	Total/NA	Solid	8021B	50207
LCS 880-50194/1-A	Lab Control Sample	Total/NA	Solid	8021B	50194
LCSD 880-50194/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50194
890-4403-1 MS	FS05A	Total/NA	Solid	8021B	50194
890-4403-1 MSD	FS05A	Total/NA	Solid	8021B	50194

Analysis Batch: L5415

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	Total BTEX	
890-4403-2	FS08A	Total/NA	Solid	Total BTEX	
890-4403-3	FS09A	Total/NA	Solid	Total BTEX	
890-4403-4	FS14A	Total/NA	Solid	Total BTEX	
890-4403-5	FS15A	Total/NA	Solid	Total BTEX	
890-4403-6	SW12	Total/NA	Solid	Total BTEX	
890-4403-7	SW13	Total/NA	Solid	Total BTEX	
890-4403-8	SW14	Total/NA	Solid	Total BTEX	
890-4403-9	SW15	Total/NA	Solid	Total BTEX	
890-4403-10	FS16	Total/NA	Solid	Total BTEX	
890-4403-11	FS17	Total/NA	Solid	Total BTEX	
890-4403-12	FS18	Total/NA	Solid	Total BTEX	
890-4403-13	FS19	Total/NA	Solid	Total BTEX	
890-4403-14	FS20	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 49806

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	8015NM Prep	
890-4403-2	FS08A	Total/NA	Solid	8015NM Prep	
890-4403-3	FS09A	Total/NA	Solid	8015NM Prep	
890-4403-4	FS14A	Total/NA	Solid	8015NM Prep	
890-4403-5	FS15A	Total/NA	Solid	8015NM Prep	
890-4403-6	SW12	Total/NA	Solid	8015NM Prep	
890-4403-7	SW13	Total/NA	Solid	8015NM Prep	
890-4403-8	SW14	Total/NA	Solid	8015NM Prep	
MB 880-49837/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49837/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49837/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4399-A-4-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4399-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

GC Semi VOA

Prep Batch: 49808

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-9	SW15	Total/NA	Solid	8015NM Prep	
890-4403-10	FS16	Total/NA	Solid	8015NM Prep	
890-4403-11	FS17	Total/NA	Solid	8015NM Prep	
890-4403-12	FS18	Total/NA	Solid	8015NM Prep	
890-4403-13	FS19	Total/NA	Solid	8015NM Prep	
890-4403-14	FS20	Total/NA	Solid	8015NM Prep	
MB 880-49838/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-49838/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-49838/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4403-9 MS	SW15	Total/NA	Solid	8015NM Prep	
890-4403-9 MSD	SW15	Total/NA	Solid	8015NM Prep	

Analysis Batch: 49958

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-9	SW15	Total/NA	Solid	8015B NM	49838
890-4403-10	FS16	Total/NA	Solid	8015B NM	49838
890-4403-11	FS17	Total/NA	Solid	8015B NM	49838
890-4403-12	FS18	Total/NA	Solid	8015B NM	49838
890-4403-13	FS19	Total/NA	Solid	8015B NM	49838
890-4403-14	FS20	Total/NA	Solid	8015B NM	49838
MB 880-49838/1-A	Method Blank	Total/NA	Solid	8015B NM	49838
LCS 880-49838/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49838
LCSD 880-49838/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49838
890-4403-9 MS	SW15	Total/NA	Solid	8015B NM	49838
890-4403-9 MSD	SW15	Total/NA	Solid	8015B NM	49838

Analysis Batch: 49915

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	8015B NM	49837
890-4403-2	FS08A	Total/NA	Solid	8015B NM	49837
890-4403-3	FS09A	Total/NA	Solid	8015B NM	49837
890-4403-4	FS14A	Total/NA	Solid	8015B NM	49837
890-4403-5	FS15A	Total/NA	Solid	8015B NM	49837
890-4403-6	SW12	Total/NA	Solid	8015B NM	49837
890-4403-7	SW13	Total/NA	Solid	8015B NM	49837
890-4403-8	SW14	Total/NA	Solid	8015B NM	49837
MB 880-49837/1-A	Method Blank	Total/NA	Solid	8015B NM	49837
LCS 880-49837/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	49837
LCSD 880-49837/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	49837
890-4399-A-4-B MS	Matrix Spike	Total/NA	Solid	8015B NM	49837
890-4399-A-4-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	49837

Analysis Batch: L552(

bal Sample ID	Client Sample ID	Prep MYPE	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Total/NA	Solid	8015 NM	
890-4403-2	FS08A	Total/NA	Solid	8015 NM	
890-4403-3	FS09A	Total/NA	Solid	8015 NM	
890-4403-4	FS14A	Total/NA	Solid	8015 NM	
890-4403-5	FS15A	Total/NA	Solid	8015 NM	
890-4403-6	SW12	Total/NA	Solid	8015 NM	
890-4403-7	SW13	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

GC Semi VOA)Continue37

Analysis Batch: L552()Continue37

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4403-8	SW14	Total/NA	Solid	8015 NM	
890-4403-9	SW15	Total/NA	Solid	8015 NM	
890-4403-10	FS16	Total/NA	Solid	8015 NM	
890-4403-11	FS17	Total/NA	Solid	8015 NM	
890-4403-12	FS18	Total/NA	Solid	8015 NM	
890-4403-13	FS19	Total/NA	Solid	8015 NM	
890-4403-14	FS20	Total/NA	Solid	8015 NM	

HPbC/DC

beach Batch: L51((

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Soluble	Solid	DI Leach	
890-4403-2	FS08A	Soluble	Solid	DI Leach	
890-4403-3	FS09A	Soluble	Solid	DI Leach	
890-4403-4	FS14A	Soluble	Solid	DI Leach	
890-4403-5	FS15A	Soluble	Solid	DI Leach	
890-4403-6	SW12	Soluble	Solid	DI Leach	
890-4403-7	SW13	Soluble	Solid	DI Leach	
890-4403-8	SW14	Soluble	Solid	DI Leach	
890-4403-9	SW15	Soluble	Solid	DI Leach	
890-4403-10	FS16	Soluble	Solid	DI Leach	
890-4403-11	FS17	Soluble	Solid	DI Leach	
890-4403-12	FS18	Soluble	Solid	DI Leach	
890-4403-13	FS19	Soluble	Solid	DI Leach	
890-4403-14	FS20	Soluble	Solid	DI Leach	
MB 880-50166/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50166/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50166/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4403-7 MS	SW13	Soluble	Solid	DI Leach	
890-4403-7 MSD	SW13	Soluble	Solid	DI Leach	

Analysis Batch: L5011

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4403-1	FS05A	Soluble	Solid	300.0	50166
890-4403-2	FS08A	Soluble	Solid	300.0	50166
890-4403-3	FS09A	Soluble	Solid	300.0	50166
890-4403-4	FS14A	Soluble	Solid	300.0	50166
890-4403-5	FS15A	Soluble	Solid	300.0	50166
890-4403-6	SW12	Soluble	Solid	300.0	50166
890-4403-7	SW13	Soluble	Solid	300.0	50166
890-4403-8	SW14	Soluble	Solid	300.0	50166
890-4403-9	SW15	Soluble	Solid	300.0	50166
890-4403-10	FS16	Soluble	Solid	300.0	50166
890-4403-11	FS17	Soluble	Solid	300.0	50166
890-4403-12	FS18	Soluble	Solid	300.0	50166
890-4403-13	FS19	Soluble	Solid	300.0	50166
890-4403-14	FS20	Soluble	Solid	300.0	50166
MB 880-50166/1-A	Method Blank	Soluble	Solid	300.0	50166
LCS 880-50166/2-A	Lab Control Sample	Soluble	Solid	300.0	50166
LCSD 880-50166/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50166

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QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

HPbC/ID)Continue37

Analysis Batch: L5011)Continue37

bal	Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4403-7 MS		SW13	Soluble	Solid	300.0	50166
890-4403-7 MSD		SW13	Soluble	Solid	300.0	50166

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

Lab Chronicle

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4403-2
/ DG: 03C2558296

Client Sample ID: FS05A
Date Collected: 03/23/23 10:15
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			4.9g y	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 20:36	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 23:U8	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 20:55	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.0Uy	20 mk	4983g	03dJ9dJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03ø30dJ 29:UU	/ M	EET MID
/ oluble	keLj h	DI keLj h			5 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U:43	/ MC	EET MID

Client Sample ID: FS08A
Date Collected: 03/23/23 10:20
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			4.96 y	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 25:U8	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 2g:U4	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 20:55	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.04 y	20 mk	4983g	03dJ9dJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03ø30dJ 29:44	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.98 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U:5g	/ MC	EET MID

Client Sample ID: FS09A
Date Collected: 03/23/23 10:25
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.0Uy	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 25:49	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 2g:U4	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 20:55	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.02 y	20 mk	4983g	03dJ9dJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03ø30dJ U:06	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.9g y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:02	/ MC	EET MID

Client Sample ID: FS14A
Date Collected: 03/23/23 11:00
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.03 y	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 26:09	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 2g:U4	/ M	EET MID

EuPøins CLRsblf

Lab Chronicle

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4UOH

Job ID: 890-4403-2
/ DG: 03C2558296

Client Sample ID: FS14A
Date Collected: 03/23/23 11:00
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	AnLIBsis	8025 NM		2			500U6	03G2dJ 20:55	/ M	EET MID
TotLidNA	1 Rep	8025NM 1 Rep			20.04 y	20 mk	4983g	03dJdJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03G0dJ U0:Ug	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.98 y	50 mk	50266	04G3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04G3dJ U2:06	/ MC	EET MID

Client Sample ID: FS15A
Date Collected: 03/23/23 11:05
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Rep	5035			5.02 y	5 mk	50294	04G3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04G5dJ 26:30	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04G6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03G2dJ 20:55	/ M	EET MID
TotLidNA	1 Rep	8025NM 1 Rep			20.02 y	20 mk	4983g	03dJdJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03G0dJ U0:49	/ M	EET MID
/ oluble	keLj h	DI keLj h			5.03 y	50 mk	50266	04G3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04G3dJ U2:20	/ MC	EET MID

Client Sample ID: SW12
Date Collected: 03/23/23 12:45
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Rep	5035			4.9g y	5 mk	50294	04G3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04G5dJ 26:52	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04G6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03G2dJ 20:55	/ M	EET MID
TotLidNA	1 Rep	8025NM 1 Rep			20.03 y	20 mk	4983g	03dJdJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03G0dJ U2:22	/ M	EET MID
/ oluble	keLj h	DI keLj h			5.04 y	50 mk	50266	04G3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04G3dJ U2:25	/ MC	EET MID

Client Sample ID: SW13
Date Collected: 03/23/23 12:50
Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Rep	5035			4.95 y	5 mk	50294	04G3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04G5dJ 2g:2U	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04G6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03G2dJ 20:55	/ M	EET MID
TotLidNA	1 Rep	8025NM 1 Rep			20.03 y	20 mk	4983g	03dJdJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03G0dJ U2:33	/ M	EET MID

EuRøins CLRsblf

Lab Chronicle

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4UOH

Job ID: 890-4403-2
/ DG: 03C2558296

Client Sample ID: SW13

Lab Sample ID: 890-4403-7

Date Collected: 03/23/23 12:50

Matrix: Solid

Date Received: 03/23/23 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
/ oluble	keLj h	DI keLj h			5.0Uy	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:29	/ MC	EET MID

Client Sample ID: SW14

Lab Sample ID: 890-4403-8

Date Collected: 03/23/23 12:55

Matrix: Solid

Date Received: 03/23/23 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.0Uy	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 2g:3U	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 20:55	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.02 y	20 mk	4983g	03dJ9dJ 2U:33	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49920	03ø30dJ U2:55	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.96 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:33	/ MC	EET MID

Client Sample ID: SW15

Lab Sample ID: 890-4403-9

Date Collected: 03/23/23 13:40

Matrix: Solid

Date Received: 03/23/23 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.03 y	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 2g:53	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 22:54	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.03 y	20 mk	49838	03dJ9dJ 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03ø30dJ 23:5U	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.96 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:3g	/ MC	EET MID

Client Sample ID: FS16

Lab Sample ID: 890-4403-10

Date Collected: 03/23/23 14:10

Matrix: Solid

Date Received: 03/23/23 16:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			4.9g y	5 mk	50294	04ø3dJ 23:29	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U86	04ø5dJ 28:24	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø6dJ 22:39	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 22:54	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.02 y	20 mk	49838	03dJ9dJ 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03ø30dJ 24:58	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.99 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:52	/ MC	EET MID

EuRøins CLRøbLf

Lab Chronicle

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4403-2
/ DG: 03C2558296

Client Sample ID: FS17

Date Collected: 03/23/23 14:15

Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-11

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.0U y	5 mk	50U09	04ø3dJ 24:28	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U85	04ø5dJ 23:42	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 26:40	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 22:54	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.0U y	20 mk	49838	03dJ9dJ 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03ø30dJ 25:U0	/ M	EET MID
/ oluble	keLj h	DI keLj h			5.03 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ U2:56	/ MC	EET MID

Client Sample ID: FS18

Date Collected: 03/23/23 14:20

Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-12

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			4.99 y	5 mk	50U09	04ø3dJ 24:28	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U85	04ø5dJ 24:0U	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 26:40	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 22:54	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.03 y	20 mk	49838	03dJ9dJ 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03ø30dJ 25:4U	/ M	EET MID
/ oluble	keLj h	DI keLj h			5 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ UU:00	/ MC	EET MID

Client Sample ID: FS19

Date Collected: 03/23/23 14:25

Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-13

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.0U y	5 mk	50U09	04ø3dJ 24:28	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U85	04ø5dJ 24:UU	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 26:40	/ M	EET MID
TotLidNA	AnLIBsis	8025 NM		2			500U6	03ø32dJ 22:54	/ M	EET MID
TotLidNA	1 Pøp	8025NM 1 Pøp			20.0U y	20 mk	49838	03dJ9dJ 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03ø30dJ 26:03	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.98 y	50 mk	50266	04ø3dJ 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04ø3dJ UU:05	/ MC	EET MID

Client Sample ID: FS20

Date Collected: 03/23/23 14:30

Date Received: 03/23/23 16:56

Lab Sample ID: 890-4403-14

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
TotLidNA	1 Pøp	5035			5.03 y	5 mk	50U09	04ø3dJ 24:28	MNR	EET MID
TotLidNA	AnLIBsis	80U2X		2	5 mk	5 mk	50U85	04ø5dJ 24:43	MNR	EET MID
TotLidNA	AnLIBsis	TotLI XTE7		2			50420	04ø5dJ 26:40	/ M	EET MID

EuRøins CLRsbLf

Lab Chronicle

Client: Ensolum
1 Proj to ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4403-2
/ DG: 03C2558296

Client Sample ID: FS20

Lab Sample ID: 890-4403-14

Date Collected: 03/23/23 14:30

Matrix: Solid

Date Received: 03/23/23 16:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
TotLidNA	AnLIBsis	8025 NM		2			500U6	03&2dJ3 22:54	/ M	EET MID
TotLidNA	1 Rep	8025NM 1 Rep			20.02 y	20 mk	49838	03dJdJ3 2U:35	AJ	EET MID
TotLidNA	AnLIBsis	8025X NM		2	2 uk	2 uk	49908	03&0dJ3 26:U6	/ M	EET MID
/ oluble	kelJ h	DI kelJ h			4.96 y	50 mk	50266	04dJdJ3 22:04	K/	EET MID
/ oluble	AnLIBsis	300.0		2	50 mk	50 mk	50322	04dJdJ3 UU:09	/ MC	EET MID

Laboratory References:

EET MID d EuP-ins Mif ILnf , 2U22 W. FloP L Ave, Mif ILnf , T7 q9q02, TEk (43U)q04-5440

Accreditation/Certification Summary

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4403-2
/ DG: 03C2558296

Laboratory: Eurofins Midland

a nless otheRwise noted, LI LnLlytes foPthis ILboR.toPy weR j oveRð undePeLj h Lj j ReditLtionð eRtifi j Ltion below.

Authority	Program	Identification Number	Expiration Date
TexLs	NEkA1	T204704400-UU-U5	06-30-U3

The following LnLlytes LR inj luded in this RepoR, but the ILboR.toPy is not j eRified by the goveRning LuthoRty. This list mLy inj lude LnLlytes foPwhij h the Lgenj y does not offePj eRtifi j Ltion.

AnLlysis Method	1 Rep Method	MLtRx	AnLlyte
8025 NM		/ olid	TotLI T1 H
TotLI BTEX		/ olid	TotLI BTEX

Method Summary

1 0 en t eEoGu
6 Rri j rri : 6 o/i PkL/i a eln4U0H

Job ID: 890-4403-2
mDS: 031 2GG8295

Method	Method Description	Protocol	Laboratory
80L2B	VoCnC ORjLelj 1 ou posedE(S1)	mW845	t t T MID
TorLCBTt X	TorLCBTt X 1 LQsCrtoe	Tak mO6	t t T MID
802GNM	Dli Ei CRLegi ORjLelj E(DRO) (S1)	mW845	t t T MID
802GB NM	Dli Ei CRLegi ORjLelj E(DRO) (S1)	mW845	t t T MID
300.0	AeloeE, loe 1 hRu LrögRlphy	t 6A	t t T MID
G03G	1 0E d myEri u 6 sRji Led TRlp	mW845	t t T MID
802GNM 6R p	Mlj Rbi xrRj rtoe	mW845	t t T MID
DI ki Lj h	Di loelzi d WLri Pki Lj hleg 6Rj i dsR	AmTM	t t T MID

Protocol References:

AmTM = AmTM leri RlrlloeLC
t 6A = a mt evlRœu i erLC6 Rri j rtœ Agi ej y
mW845 = "Ti EnMi rhodEFoPt vLGLrlleg mœl WLEri , 6hyBj LQl hi u lj LQMri rhodE", ThIRl t dlrloe, Novi u bi P2985 Aed IrEapdLri E
Tak mO6 = Ti ErAu i Rj L kLboRlroR E, mLedLRl Opi Rrlleg 6Rj i dsR

Laboratory References:

t t T MID = t sRfleEMldCed, 2U22 W. FØRdL Avi , MldCed, TX 79702, Tt k (43U)704-G440

Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4403-1
SDG: 03C1558196

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4403-1	FS05A	Solid	03/23/23 10:15	03/23/23 16:56	3'
890-4403-2	FS08A	Solid	03/23/23 10:20	03/23/23 16:56	3'
890-4403-3	FS09A	Solid	03/23/23 10:25	03/23/23 16:56	3'
890-4403-4	FS14A	Solid	03/23/23 11:00	03/23/23 16:56	3'
890-4403-5	FS15A	Solid	03/23/23 11:05	03/23/23 16:56	3'
890-4403-6	SW12	Solid	03/23/23 12:45	03/23/23 16:56	0-3'
890-4403-7	SW13	Solid	03/23/23 12:50	03/23/23 16:56	0-3'
890-4403-8	SW14	Solid	03/23/23 12:55	03/23/23 16:56	0-3'
890-4403-9	SW15	Solid	03/23/23 13:40	03/23/23 16:56	0-3'
890-4403-10	FS16	Solid	03/23/23 14:10	03/23/23 16:56	3'
890-4403-11	FS17	Solid	03/23/23 14:15	03/23/23 16:56	3'
890-4403-12	FS18	Solid	03/23/23 14:20	03/23/23 16:56	3'
890-4403-13	FS19	Solid	03/23/23 14:25	03/23/23 16:56	3'
890-4403-14	FS20	Solid	03/23/23 14:30	03/23/23 16:56	3'



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) 986-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 1 of 2

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code
Project Number:	03C1558196	Due Date:		
Project Location:		TAT starts the day received by the lab, if received by 4:30pm		
Sampler's Name:	Connor Whitman			
PO #:				
SAMPLE RECEIPT	Temp Blank: ☒ Yes ☒ No	Thermometer ID:	(Yes/No)	
Samples Received Intact:	Yes ☒ No ☒ N/A	Correction Factor:		
Cooler Custody Seals:	Yes ☒ No ☒ N/A	Temperature Reading:		
Sample Custody Seals:	Yes ☒ No ☒ N/A	Corrected Temperature:		
Total Containers:				

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)	ANALYSIS REQUEST	Preservative Codes
FS03A	S	3/23/23	10:15	3'	C	1					None: NO DI Water: H ₂ O
FS08A			10:20	3'		1					Cool: Cool MeOH: Me
FS09A			10:25	3'		1					HCL: HC HNO ₃ : HN
FS14A			11:00	3'		1					H ₂ SO ₄ : H ₂ NaOH: Na
FS15A			11:05	3'		1					H ₃ PO ₄ : HP
SV12			12:43	0-3'		1					NaHSO ₄ : MABIS
SV13			12:50	0-3'		1					Na ₂ S ₂ O ₃ : NaSO ₃
SV14			12:55	0-3'		1					Zn Acetate+NaOH: Zn
SV15			1:00	0-3'		1					NaOH+Ascorbic Acid: SAPC
FS16			2:10	3'		1					

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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
1 <i>CHN</i>	<i>James A. Stief</i>	3/23/23 16:35			
3					
5					



Environmental Testing

TXCNC

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) 794-1236
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No:

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Page 2 of 2

Project Manager:	Tacoma Morrissey	Bill to: (if different)	Garrett Green
Company Name:	Ensolium	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Green St.
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	303-867-2946	Email:	Garrett.Green@ExxonMobil.com

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	ANALYSIS REQUEST																Preservative Codes			
Project Number:	03C1558196	Due Date:																				None: NO	DI Water: H ₂ O	
Project Location:																						Cool: Cool	MeOH: Me	
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm																				HCL: HC	HNO ₃ : HN	
PO #:																						H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	Gas No	Well Ice:	Yes	No																	H ₃ PO ₄ : HP		
	Samples Received Intact:	Yes	No	Thermometer ID:																		NaHSO ₄ : NABIS		
	Cooler Custody Seals:	Yes	No	Correction Factor:																		Na ₂ S ₂ O ₃ : NaSO ₃		
	Sample Custody Seals:	Yes	No	Temperature Reading:																		Zn Acetate+NaOH: Zn		
Total Containers:		Corrected Temperature:																				NaOH+Ascorbic Acid: SACP		
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont																	Sample Comments	
	F517	8/2/20	2:15	3'	C	1																	Incident ID:	
	F518		2:20	3'	C	1																	NAB1834656162	
	F519		2:25	3'	C	1																	Cost Center:	
F520		2:30	3'	C	1																	1139851001		
																	AFE:							
																	PA 2022 04878 EXP 01							

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 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>[Signature]</i>	<i>[Signature]</i>	3/23/23 16:46			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4403-1

SDG Number: 03C1558196

Login Number: 4403

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4403-1

SDG Number: 03C1558196

Login Number: 4403

List Number: 2

Creator: Kramer, Jessica

List Source: Eurofins Midland

List Creation: 03/28/23 01:37 PM

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/10/2023 9:48:22 AM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4449-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
4/10/2023 9:48:22 AM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4449-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualifier Description
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 420H

Job ID: 890-4449-1
SDG: 03C1558196

Job ID: 890-4449-1

Laboratory: Eurofins Carlsbad

Narrative	Job Narrative 890-4449-1

Receipt

The samples were received on 3/30/2023 1:40 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 1.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50409 and analytical batch 880-50422 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 samples were outside control limits: (880-26767-A-1-G) and (880-26767-A-1-E MS). 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

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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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Client Sample ID: SW24

Lab Sample ID: 890-4449-1

Date Collected: 03/28/23 12:10

Matrix: Solid

Date Received: 03/30/23 13:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/06/23 11:50	04/08/23 03:51	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/06/23 11:50	04/08/23 03:51	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/06/23 11:50	04/08/23 03:51	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/06/23 11:50	04/08/23 03:51	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/06/23 11:50	04/08/23 03:51	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/06/23 11:50	04/08/23 03:51	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	922		72 - 902	24/23/0 09:52	24/26/0 20:59	9
9,4-Difluorobenzene (Surr)	925		72 - 902	24/23/0 09:52	24/26/0 20:59	9

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/10/23 10:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			04/04/23 09:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:37	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:37	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:37	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
9-8 Chlorohd ne	99a		72 - 902	24/20/0 09:59	24/24/0 20:07	9
o-TerpCenyl	92/		72 - 902	24/20/0 09:59	24/24/0 20:07	9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	84.5		4.98	mg/Kg			04/07/23 00:42	1

Client Sample ID: FS36

Lab Sample ID: 890-4449-2

Date Collected: 03/28/23 12:25

Matrix: Solid

Date Received: 03/30/23 13:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:12	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:12	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:12	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/06/23 11:50	04/08/23 04:12	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:12	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/06/23 11:50	04/08/23 04:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	926		72 - 902	24/23/0 09:52	24/26/0 24:9/	9
9,4-Difluorobenzene (Surr)	925		72 - 902	24/23/0 09:52	24/26/0 24:9/	9

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Client Sample ID: FS36

Lab Sample ID: 890-4449-2

Date Collected: 03/28/23 12:25

Matrix: Solid

Date Received: 03/30/23 13:40

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/10/23 10:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			04/04/23 09:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:58	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:58	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/03/23 14:51	04/04/23 03:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-8 Chloroohd ne	923		72 - 902			24/201/0 94:59	24/241/0 20:56	9
o-TerpCenyl	66		72 - 902			24/201/0 94:59	24/241/0 20:56	9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	114		4.99	mg/Kg			04/07/23 00:46	1

Client Sample ID: FS37

Lab Sample ID: 890-4449-3

Date Collected: 03/28/23 12:30

Matrix: Solid

Date Received: 03/30/23 13:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/06/23 11:50	04/08/23 04:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	922		72 - 902			24/231/0 99:52	24/261/0 24:0/	9
9,4-Difluorobenzene (Surr)	920		72 - 902			24/231/0 99:52	24/261/0 24:0/	9

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			04/10/23 10:29	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			04/04/23 09:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:19	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:19	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Client Sample ID: FS37

Lab Sample ID: 890-4449-3

Date Collected: 03/28/23 12:30

Matrix: Solid

Date Received: 03/30/23 13:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-8 Chlorohd ne	996		72 - 902			24/20/10 94:59	24/24/10 24:9a	9
o-TerpCenyl	920		72 - 902			24/20/10 94:59	24/24/10 24:9a	9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	75.2		5.05	mg/Kg			04/07/23 00:51	1

Client Sample ID: FS38

Lab Sample ID: 890-4449-4

Date Collected: 03/28/23 12:35

Matrix: Solid

Date Received: 03/30/23 13:40

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/05/23 13:17	04/06/23 03:20	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	929		72 - 902			24/25/10 90:97	24/23/10 20:/ 2	9
9,4-Difluorobenzene (Surr)	69		72 - 902			24/25/10 90:97	24/23/10 20:/ 2	9

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			04/06/23 09:48	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			04/04/23 09:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:40	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:40	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/03/23 14:51	04/04/23 04:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-8 Chlorohd ne	92/		72 - 902			24/20/10 94:59	24/24/10 24:42	9
o-TerpCenyl	6/		72 - 902			24/20/10 94:59	24/24/10 24:42	9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	77.2		5.02	mg/Kg			04/07/23 00:56	1

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26767-A-1-E MS	Matrix Spike	56 S1-	97
880-26767-A-1-F MSD	Matrix Spike Duplicate	70	74
890-4449-1	SW24	100	105
890-4449-1 MS	SW24	104	106
890-4449-1 MSD	SW24	100	111
890-4449-2	FS36	108	105
890-4449-3	FS37	100	103
890-4449-4	FS38	101	81
LCS 880-50409/1-A	Lab Control Sample	91	116
LCS 880-50513/1-A	Lab Control Sample	105	111
LCSD 880-50409/2-A	Lab Control Sample Dup	115	111
LCSD 880-50513/2-A	Lab Control Sample Dup	101	109
MB 880-50409/5-A	Method Blank	77	71
MB 880-50513/5-A	Method Blank	92	97
MB 880-50621/8	Method Blank	91	100
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4449-1	SW24	119	102
890-4449-2	FS36	106	88
890-4449-3	FS37	118	103
890-4449-4	FS38	102	82
890-4450-A-2-A MS	Matrix Spike	107	75
890-4450-A-2-B MSD	Matrix Spike Duplicate	105	75
LCS 880-50213/2-A	Lab Control Sample	126	93
LCSD 880-50213/3-A	Lab Control Sample Dup	103	76
MB 880-50213/1-A	Method Blank	121	102
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Carlsbad

QC Sample Results

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Proji crlmri : Poki r Laki Ueln420H

Job ID: 890-4449-3
mDS: 0GI 3558396

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50409/5-A					Client Sample ID: Method Blank			
Matrix: Solid					Prep Type: Total/NA			
Analysis Batch: 50422					Prep Batch: 50409			
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bi ezi ei	<0.00200	U	0.00200	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
hoSi ei	<0.00200	U	0.00200	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
t ryXB i ezi ei	<0.00200	U	0.00200	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
u -&XCei p , -&XCei	<0.00400	U	0.00400	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
o-&XCei	<0.00200	U	0.00200	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
&XCei E7horæC	<0.00400	U	0.00400	u g/Kg		04/05/2G3G3T	04/05/2G39:28	3
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		92 - 702			24 231 0 7059	24 231 0 7: 5 6	7
7,4-Difluorobenzene (Surr)	97		92 - 702			24 231 0 7059	24 231 0 7: 5 6	7

Lab Sample ID: LCS 880-50409/1-A				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Total/NA						
Analysis Batch: 50422				Prep Batch: 50409						
			Spike	LCS	LCS			%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Bi ezi ei			0.300	0.3389		u g/Kg		339	T0 - 3G0	
hoSi ei			0.300	0.09996		u g/Kg		300	T0 - 3G0	
t ryXB i ezi ei			0.300	0.09542		u g/Kg		95	T0 - 3G0	
u -&XCei p , -&XCei			0.200	0.3888		u g/Kg		94	T0 - 3G0	
o-&XCei			0.300	0.09539		u g/Kg		95	T0 - 3G0	
			LCS	LCS						
Surrogate		%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)		7		92 - 702						
7,4-Difluorobenzene (Surr)		778		92 - 702						

Lab Sample ID: LCSD 880-50409/2-A				Client Sample ID: Lab Control Sample Dup								
Matrix: Solid				Prep Type: Total/NA								
Analysis Batch: 50422				Prep Batch: 50409								
Analyte	Spike			LCSD	LCSD	Unit	D	%Rec	%Rec		RPD	RPD
	Added	Result	Qualifier	Limits	RPD				Limit			
Bi ezi ei	0.300	0.3024		u g/Kg		302	T0 - 3G0	35	G6			
hoSi ei	0.300	0.09449		u g/Kg		94	T0 - 3G0	6	G6			
t ryXB i ezi ei	0.300	0.09983		u g/Kg		300	T0 - 3G0	5	G6			
u -&XCei p , -&XCei	0.200	0.2309		u g/Kg		305	T0 - 3G0	33	G6			
o-&XCei	0.300	0.3075		u g/Kg		307	T0 - 3G0	32	G6			
LCSD		LCSD										
Surrogate	%Recovery	Qualifier	Limits									
4-Bromofluorobenzene (Surr)	773		92 - 702									
7,4-Difluorobenzene (Surr)	777		92 - 702									

Lab Sample ID: 880-26767-A-1-E MS								Client Sample ID: Matrix Spike		
Matrix: Solid								Prep Type: Total/NA		
Analysis Batch: 50422								Prep Batch: 50409		
Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	
	Result	Qualifier	Added	Result	Qualifier				Limits	
Bi ezi ei	<0.00200	U f 3	0.0998	0.0G842	f 3	u g/Kg		G8	T0 - 3G0	
hoSi ei	<0.00200	U f 3	0.0998	0.02439	f 3	u g/Kg		24	T0 - 3G0	

t srodeE1 arGbaF

QC Sample Results

10 ent eEoSu

Job ID: 890-4449-3

Proji crlmlri : Poki r Laki Ueln420H

mDS: 0GI 3558396

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

Lab Sample ID: 880-26767-A-1-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50422

Prep Batch: 50409

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
t ryXB i ezi ei	<0.00200	U f 3 f 2	0.0998	0.03643	f 3	u g/Kg		36	T0 - 3G0
u -&XCei p , -&XCei	<0.00403	U f 3 f 2	0.200	0.02T63	f 3	u g/Kg		34	T0 - 3G0
o-&XCei	<0.00200	U f 3 f 2	0.0998	0.03445	f 3	u g/Kg		34	T0 - 3G0

Surrogate	MS %Recovery	MS Qualifier	MS Limits
4-Bromofluorobenzene (Surr)	38	S7-	92 - 702
7,4-Difluorobenzene (Surr)	: 9		92 - 702

Lab Sample ID: 880-26767-A-1-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50422

Prep Batch: 50409

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bi ezi ei	<0.00200	U f 3	0.0990	0.0294G	f 3	u g/Kg		G0	T0 - 3G0	26	G5
hoSi ei	<0.00200	U f 3	0.0990	0.0G440	f 3	u g/Kg		G5	T0 - 3G0	G5	G5
t ryXB i ezi ei	<0.00200	U f 3 f 2	0.0990	0.0G042	f 3 f 2	u g/Kg		G3	T0 - 3G0	60	G5
u -&XCei p , -&XCei	<0.00403	U f 3 f 2	0.398	0.05480	f 3 f 2	u g/Kg		28	T0 - 3G0	66	G5
o-&XCei	<0.00200	U f 3 f 2	0.0990	0.02T4G	f 3 f 2	u g/Kg		28	T0 - 3G0	62	G5

Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits
4-Bromofluorobenzene (Surr)	92		92 - 702
7,4-Difluorobenzene (Surr)	94		92 - 702

Lab Sample ID: MB 880-50513/5-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50621

Prep Batch: 50513

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bi ezi ei	<0.00200	U	0.00200	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3
hoSi ei	<0.00200	U	0.00200	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3
t ryXB i ezi ei	<0.00200	U	0.00200	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3
u -&XCei p , -&XCei	<0.00400	U	0.00400	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3
o-&XCei	<0.00200	U	0.00200	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3
&XCei E7horæC	<0.00400	U	0.00400	u g/Kg		04/06/2G33:50	04/08/2G0G2G	3

Surrogate	MB %Recovery	MB Qualifier	MB Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	: /		92 - 702	24 281 0 7752	24 261 0 205 0	7
7,4-Difluorobenzene (Surr)	: 9		92 - 702	24 281 0 7752	24 261 0 205 0	7

Lab Sample ID: LCS 880-50513/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50621

Prep Batch: 50513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bi ezi ei	0.300	0.3084		u g/Kg		308	T0 - 3G0
hoSi ei	0.300	0.304G		u g/Kg		304	T0 - 3G0
t ryXB i ezi ei	0.300	0.09T39		u g/Kg		9T	T0 - 3G0
u -&XCei p , -&XCei	0.200	0.3938		u g/Kg		96	T0 - 3G0

t srodeE1 arGbaF

QC Sample Results

10 ent eEoGu

Proji crlmlri : Poki r Laki Ueln420H

Job ID: 890-4449-3

mDS: 0GI 3558396

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

Lab Sample ID: LCS 880-50513/1-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
o-&XCeI	0.300	0.09T53		u g/Kg		98	T0 - 3G0

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	723		92 - 702
7,4-Difluorobenzene (Surr)	777		92 - 702

Lab Sample ID: LCSD 880-50513/2-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bi ezi ei	0.300	0.309G		u g/Kg		309	T0 - 3G0	3	G5
hoSi ei	0.300	0.3042		u g/Kg		304	T0 - 3G0	0	G5
t ryXDi ezi ei	0.300	0.09465		u g/Kg		95	T0 - 3G0	G	G5
u -&XCeI p , -&XCeI	0.200	0.385T		u g/Kg		9G	T0 - 3G0	G	G5
o-&XCeI	0.300	0.09403		u g/Kg		94	T0 - 3G0	4	G5

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	727		92 - 702
7,4-Difluorobenzene (Surr)	72:		92 - 702

Lab Sample ID: 890-4449-1 MS

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: SW24

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bi ezi ei	<0.00203	U	0.0998	0.3056		u g/Kg		306	T0 - 3G0
hoSi ei	<0.00203	U	0.0998	0.3039		u g/Kg		302	T0 - 3G0
t ryXDi ezi ei	<0.00203	U	0.0998	0.09224		u g/Kg		92	T0 - 3G0
u -&XCeI p , -&XCeI	<0.00402	U	0.200	0.3T90		u g/Kg		90	T0 - 3G0
o-&XCeI	<0.00203	U	0.0998	0.09352		u g/Kg		92	T0 - 3G0

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	724		92 - 702
7,4-Difluorobenzene (Surr)	728		92 - 702

Lab Sample ID: 890-4449-1 MSD

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: SW24

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bi ezi ei	<0.00203	U	0.0990	0.304G		u g/Kg		305	T0 - 3G0	3	G5
hoSi ei	<0.00203	U	0.0990	0.099G4		u g/Kg		300	T0 - 3G0	G	G5
t ryXDi ezi ei	<0.00203	U	0.0990	0.09093		u g/Kg		92	T0 - 3G0	3	G5
u -&XCeI p , -&XCeI	<0.00402	U	0.398	0.3T82		u g/Kg		90	T0 - 3G0	0	G5
o-&XCeI	<0.00203	U	0.0990	0.09054		u g/Kg		93	T0 - 3G0	3	G5

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QC Sample Results

10 ent eEoGu

Proji crlmlri : Poki r Laki Ueln420H

Job ID: 890-4449-3

mDS: 0G1 3558396

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

Lab Sample ID: 890-4449-1 MSD

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: SW24

Prep Type: Total/NA

Prep Batch: 50513

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	722		92 - 702
7,4-Difluorobenzene (Surr)	777		92 - 702

Lab Sample ID: MB 880-50621/8

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Bi ezi ei	<0.00200	U	0.00200	u g/Kg			04/0T/2G35:4T	3	
hoSi ei	<0.00200	U	0.00200	u g/Kg			04/0T/2G35:4T	3	
t ryXBi ezi ei	<0.00200	U	0.00200	u g/Kg			04/0T/2G35:4T	3	
u -&XCei p , -&XCei	<0.00400	U	0.00400	u g/Kg			04/0T/2G35:4T	3	
o-&XCei	<0.00200	U	0.00200	u g/Kg			04/0T/2G35:4T	3	
&XCei E7horæC	<0.00400	U	0.00400	u g/Kg			04/0T/2G35:4T	3	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	: 7		92 - 702				24/29/0 7:59	7	
7,4-Difluorobenzene (Surr)	722		92 - 702				24/29/0 7:59	7	

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

Lab Sample ID: MB 880-50213/1-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50213

Analyte	MB	MB							
	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
SaEoEi Raegi OrgaelcE (SRO)-1 6-1 30	<50.0	U	50.0	u g/Kg		04/0G2G34:53	04/0G2G39:42	3	
Dli Ei CRaegi OrgaelcE (Ovi r 1 30-1 28)	<50.0	U	50.0	u g/Kg		04/0G2G34:53	04/0G2G39:42	3	
OICRaegi OrgaelcE (Ovi r 1 28-1 G6)	<50.0	U	50.0	u g/Kg		04/0G2G34:53	04/0G2G39:42	3	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
7-Chlorooctane	7/ 7		92 - 702			24/20/0 7:57	24/20/0 7: 54/	7	
o-Terphenyl	72/		92 - 702			24/20/0 7:57	24/20/0 7: 54/	7	

Lab Sample ID: LCS 880-50213/2-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50213

Analyte	Spike	LCS	LCS					%Rec	
	Added	Result	Qualifier	Unit	D	%Rec	Limits		
SaEoEi Raegi OrgaelcE (SRO)-1 6-1 30	3000	86G4		u g/Kg		86	T0 - 3G0		
Dli Ei CRaegi OrgaelcE (Ovi r 1 30-1 28)	3000	886.6		u g/Kg		89	T0 - 3G0		
Surrogate	%Recovery	Qualifier	Limits						
7-Chlorooctane	7/ 8		92 - 702						
o-Terphenyl	: 0		92 - 702						

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QC Sample Results

10 ent eEoGu
Proji crlmlri : Poki r Laki Ueln420H

Job ID: 890-4449-3
mDS: 0GI 3558396

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

Lab Sample ID: LCSD 880-50213/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 50112				Prep Batch: 50213							
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
SaEoEi Raegi OrgaelcE (SRO)-1 6-1 30			3000	905.T		u g/Kg		93	T0 - 3G0	5	20
Dli E CRaegi OrgaelcE (Ovi r 1 30-1 28)			3000	928.G		u g/Kg		9G	T0 - 3G0	5	20
LCSD LCSD											
Surrogate	%Recovery	Qualifier	Limits								
7-Chlorooctane	720		92 - 702								
o-Terphenyl	98		92 - 702								

Lab Sample ID: 890-4450-A-2-A MS				Client Sample ID: Matrix Spike							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 50112				Prep Batch: 50213							
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
SaEoEi Raegi OrgaelcE (SRO)-1 6-1 30	<49.9	U	995	333T		u g/Kg		309	T0 - 3G0		
Dli E CRaegi OrgaelcE (Ovi r 1 30-1 28)	56.4		995	882.2		u g/Kg		8G	T0 - 3G0		
MS MS											
Surrogate	%Recovery	Qualifier	Limits								
7-Chlorooctane	729		92 - 702								
o-Terphenyl	93		92 - 702								

Lab Sample ID: 890-4450-A-2-B MSD				Client Sample ID: Matrix Spike Duplicate							
Matrix: Solid				Prep Type: Total/NA							
Analysis Batch: 50112				Prep Batch: 50213							
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
SaEoEi Raegi OrgaelcE (SRO)-1 6-1 30	<49.9	U	999	33G6		u g/Kg		330	T0 - 3G0	2	20
Dli E CRaegi OrgaelcE (Ovi r 1 30-1 28)	56.4		999	88G6		u g/Kg		8G	T0 - 3G0	0	20
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
7-Chlorooctane	723		92 - 702								
o-Terphenyl	93		92 - 702								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50419/1-A				Client Sample ID: Method Blank							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50615											
Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
1 y@rlFi	<5.00	U	5.00	u g/Kg			04/06/2G22:4G	3			

t srodeE 1 arGbaF

QC Sample Results

10 ent eEoGu
Proji cr/mrri : Poki r Laki Ueln420H

Job ID: 890-4449-3
mDS: 0GI 3558396

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50419/2-A				Client Sample ID: Lab Control Sample						
Matrix: Solid				Prep Type: Soluble						
Analysis Batch: 50615										
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
1 y@rIFi			250	24G0		u g/Kg		9T	90 - 330	

Lab Sample ID: LCSD 880-50419/3-A				Client Sample ID: Lab Control Sample Dup						
Matrix: Solid				Prep Type: Soluble						
Analysis Batch: 50615										
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
1 y@rIFi			250	243.9		u g/Kg		9T	90 - 330	0 20

Lab Sample ID: 890-4436-A-1-D MS				Client Sample ID: Matrix Spike						
Matrix: Solid				Prep Type: Soluble						
Analysis Batch: 50615										
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
1 y@rIFi	429		3250	3650		u g/Kg		98	90 - 330	

Lab Sample ID: 890-4436-A-1-H MSD				Client Sample ID: Matrix Spike Duplicate						
Matrix: Solid				Prep Type: Soluble						
Analysis Batch: 50615										
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
1 y@rIFi	429		3250	36GG		u g/Kg		9T	90 - 330	3 20

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

GC VOA

Prep Batch: 50409

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-4	FS38	Total/NA	Solid	5035	
MB 880-50409/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50409/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50409/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-26767-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-26767-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 50422

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-4	FS38	Total/NA	Solid	8021B	50409
MB 880-50409/5-A	Method Blank	Total/NA	Solid	8021B	50409
LCS 880-50409/1-A	Lab Control Sample	Total/NA	Solid	8021B	50409
LCSD 880-50409/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50409
880-26767-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	50409
880-26767-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	50409

Analysis Batch: 50475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	Total BTEX	
890-4449-2	FS36	Total/NA	Solid	Total BTEX	
890-4449-3	FS37	Total/NA	Solid	Total BTEX	
890-4449-4	FS38	Total/NA	Solid	Total BTEX	

Prep Batch: 50513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	5035	
890-4449-2	FS36	Total/NA	Solid	5035	
890-4449-3	FS37	Total/NA	Solid	5035	
MB 880-50513/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50513/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50513/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4449-1 MS	SW24	Total/NA	Solid	5035	
890-4449-1 MSD	SW24	Total/NA	Solid	5035	

Analysis Batch: 50621

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	8021B	50513
890-4449-2	FS36	Total/NA	Solid	8021B	50513
890-4449-3	FS37	Total/NA	Solid	8021B	50513
MB 880-50513/5-A	Method Blank	Total/NA	Solid	8021B	50513
MB 880-50621/8	Method Blank	Total/NA	Solid	8021B	
LCS 880-50513/1-A	Lab Control Sample	Total/NA	Solid	8021B	50513
LCSD 880-50513/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50513
890-4449-1 MS	SW24	Total/NA	Solid	8021B	50513
890-4449-1 MSD	SW24	Total/NA	Solid	8021B	50513

GC Semi VOA

Analysis Batch: 50112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	8015B NM	50213

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

GC Semi VOA (Continued)

Analysis Batch: 50112 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-2	FS36	Total/NA	Solid	8015B NM	50213
890-4449-3	FS37	Total/NA	Solid	8015B NM	50213
890-4449-4	FS38	Total/NA	Solid	8015B NM	50213
MB 880-50213/1-A	Method Blank	Total/NA	Solid	8015B NM	50213
LCS 880-50213/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50213
LCSD 880-50213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50213
890-4450-A-2-A MS	Matrix Spike	Total/NA	Solid	8015B NM	50213
890-4450-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	50213

Prep Batch: 50213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	8015NM Prep	
890-4449-2	FS36	Total/NA	Solid	8015NM Prep	
890-4449-3	FS37	Total/NA	Solid	8015NM Prep	
890-4449-4	FS38	Total/NA	Solid	8015NM Prep	
MB 880-50213/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50213/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50213/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4450-A-2-A MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4450-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 50300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Total/NA	Solid	8015 NM	
890-4449-2	FS36	Total/NA	Solid	8015 NM	
890-4449-3	FS37	Total/NA	Solid	8015 NM	
890-4449-4	FS38	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50419

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Soluble	Solid	DI Leach	
890-4449-2	FS36	Soluble	Solid	DI Leach	
890-4449-3	FS37	Soluble	Solid	DI Leach	
890-4449-4	FS38	Soluble	Solid	DI Leach	
MB 880-50419/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50419/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50419/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4436-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-4436-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 50615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4449-1	SW24	Soluble	Solid	300.0	50419
890-4449-2	FS36	Soluble	Solid	300.0	50419
890-4449-3	FS37	Soluble	Solid	300.0	50419
890-4449-4	FS38	Soluble	Solid	300.0	50419
MB 880-50419/1-A	Method Blank	Soluble	Solid	300.0	50419
LCS 880-50419/2-A	Lab Control Sample	Soluble	Solid	300.0	50419
LCSD 880-50419/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50419

Eurofins Carlsbad

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

HPLC/IC (Continued)

Analysis Batch: 50615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4436-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	50419
890-4436-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	50419

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Lab Chronicle

Client: Ensolum
2023-09-06 14:00:14

Job ID: 890-4449-3
cDH: 00C3558396

Client Sample ID: SF 05

Lab Sample ID: A89-5558-4

Date Collected: 9/6/2023 4:49

3 atri1: SoliM

Date / ecei2eM: 9/6/2023 4:59

Trep Rvpe	6 atch Rvpe	6 atch 3 ethoM	/ Pn	Dil uactor	Initial y moPnt	uinal y moPnt	6 atch z Pmber	TprepareM or y nalvseM	y nalvBt	Lab
TotkljNA	2 1ep	50G5			4.98 g	5 mS	5053G	04j06jaG33:50	MNR	EET MID
TotkljNA	Anklysis	80a3B		3	5 mS	5 mS	506a3	04j08jaG0G53	MNR	EET MID
TotkljNA	Anklysis	Totkl BTEX		3			50475	04j30jaG30:a9	c M	EET MID
TotkljNA	Anklysis	8035 NM		3			50G00	04j04jaG09:59	c M	EET MID
TotkljNA	2 1ep	8035NM 2 1ep			30.0a g	30 mS	50a3G	04j0GjaG34:53	AJ	EET MID
TotkljNA	Anklysis	8035B NM		3	3 uS	3 uS	5033a	04j04jaG0G0G7	c M	EET MID
c oluble	Sekrh	DI Sekrh			5.0a g	50 mS	50439	04j05jaG34:53	Kc	EET MID
c oluble	Anklysis	G00.0		3	50 mS	50 mS	50635	04j07jaG00:4a	c MC	EET MID

Client Sample ID: uSxN

Lab Sample ID: A89-5558-0

Date Collected: 9/6/2023 4:00W

3 atri1: SoliM

Date / ecei2eM: 9/6/2023 4:59

Trep Rvpe	6 atch Rvpe	6 atch 3 ethoM	/ Pn	Dil uactor	Initial y moPnt	uinal y moPnt	6 atch z Pmber	TprepareM or y nalvseM	y nalvBt	Lab
TotkljNA	2 1ep	50G5			5.0a g	5 mS	5053G	04j06jaG33:50	MNR	EET MID
TotkljNA	Anklysis	80a3B		3	5 mS	5 mS	506a3	04j08jaG04:3a	MNR	EET MID
TotkljNA	Anklysis	Totkl BTEX		3			50475	04j30jaG30:a9	c M	EET MID
TotkljNA	Anklysis	8035 NM		3			50G00	04j04jaG09:59	c M	EET MID
TotkljNA	2 1ep	8035NM 2 1ep			30.0Gg	30 mS	50a3G	04j0GjaG34:53	AJ	EET MID
TotkljNA	Anklysis	8035B NM		3	3 uS	3 uS	5033a	04j04jaG0G58	c M	EET MID
c oluble	Sekrh	DI Sekrh			5.03 g	50 mS	50439	04j05jaG34:53	Kc	EET MID
c oluble	Anklysis	G00.0		3	50 mS	50 mS	50635	04j07jaG00:46	c MC	EET MID

Client Sample ID: uSx7

Lab Sample ID: A89-5558-x

Date Collected: 9/6/2023 40:x9

3 atri1: SoliM

Date / ecei2eM: 9/6/2023 4x:59

Trep Rvpe	6 atch Rvpe	6 atch 3 ethoM	/ Pn	Dil uactor	Initial y moPnt	uinal y moPnt	6 atch z Pmber	TprepareM or y nalvseM	y nalvBt	Lab
TotkljNA	2 1ep	50G5			5.0Gg	5 mS	5053G	04j06jaG33:50	MNR	EET MID
TotkljNA	Anklysis	80a3B		3	5 mS	5 mS	506a3	04j08jaG04:Ga	MNR	EET MID
TotkljNA	Anklysis	Totkl BTEX		3			50475	04j30jaG30:a9	c M	EET MID
TotkljNA	Anklysis	8035 NM		3			50G00	04j04jaG09:59	c M	EET MID
TotkljNA	2 1ep	8035NM 2 1ep			30.03 g	30 mS	50a3G	04j0GjaG34:53	AJ	EET MID
TotkljNA	Anklysis	8035B NM		3	3 uS	3 uS	5033a	04j04jaG04:39	c M	EET MID
c oluble	Sekrh	DI Sekrh			4.95 g	50 mS	50439	04j05jaG34:53	Kc	EET MID
c oluble	Anklysis	G00.0		3	50 mS	50 mS	50635	04j07jaG00:53	c MC	EET MID

Client Sample ID: uSxA

Lab Sample ID: A89-5558-5

Date Collected: 9/6/2023 40:xW

3 atri1: SoliM

Date / ecei2eM: 9/6/2023 4x:59

Trep Rvpe	6 atch Rvpe	6 atch 3 ethoM	/ Pn	Dil uactor	Initial y moPnt	uinal y moPnt	6 atch z Pmber	TprepareM or y nalvseM	y nalvBt	Lab
TotkljNA	2 1ep	50G5			4.99 g	5 mS	50409	04j05jaG3G37	MNR	EET MID
TotkljNA	Anklysis	80a3B		3	5 mS	5 mS	504aa	04j06jaG0Ga0	MNR	EET MID
TotkljNA	Anklysis	Totkl BTEX		3			50475	04j06jaG09:48	c M	EET MID

Eu1o1ns Ck1sbkf

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Job ID: 890-4449-3
cDH: 0GC3558396

Lab Sample ID: A89-5558-5
3 atr1: SoliM

Trep Rvpe	6 atch Rvpe	6 atch 3 ethoM	/ Pn	Dil uactor	Initial y moPnt	uinal y moPnt	6 atch z Pmber	TrepureM or y nalyvseM	y nalyvEt	Lab
TotkljNA	Anklysis	8035 NM		3			50G00	04j04jaG09:59	cM	EET MID
TotkljNA	2 1ep	8035NM 2 1ep			30.00 g	30 mS	50a3G	04j0GjaG34:53	AJ	EET MID
TotkljNA	Anklysis	8035B NM		3	3 uS	3 uS	5033a	04j04jaG04:40	cM	EET MID
c oluble	Sekrh	DI Sekrh			4.98 g	50 mS	50439	04j05jaG34:53	Kc	EET MID
c oluble	Anklysis	G00.0		3	50 mS	50 mS	50635	04j07jaG00:56	cMC	EET MID

EET MID d Eu1o1ns Mif lknf , 3a33 W. Flo1f k Ave, Mif lknf , TX 79703, TES(4Ga)704-5440

5

Method Summary

2 Identifiers
6 Refs: 60/1 PKL/1 ai @4U0H

Job ID: 890-4449-3
uDm: OS2 3GG3395

Method	Method Description	Protocol	Laboratory
80UBB	VoLd ORLi 2 os poEi dt (m2)	uW845	nnT MID
ToL1BTnX	ToL1BTnX 2Lj ELd	Tak uO6	nnT MID
803GNM	DCl 1RLi gl ORLi 2t (DRO) (m2)	uW845	nnT MID
803GB NM	DCl 1RLi gl ORLi 2t (DRO) (m2)	uW845	nnT MID
S00.0	Ai 2i t, loi 2hRs LdgRphy	n6A	nnT MID
QSG	2btld uyt s 6ERl Li d TRp	uW845	nnT MID
803GNM 6R p	MCl xlj	uW845	nnT MID
DI kl Lj h	DI 2i d WLd PKl Lj hCg 6Rj l dEP	AuTM	nnT MID

Protocol References:

- AuTM = AuTM li d R Ld L1
- n6A = au ni v2i s li d 16Rd j 2i Agl i j y
- uW845 = "Tl tEmI 2hodt FoPnVL ELdg uo 12 WLt d , 6hyt 2L hl s 2L1MI 2hodt", Th2 nd2i , Novl s bl P3985 Ai d l2 apdL2 t .
- Tak uO6 = Tl t2s l 22L kLboR22t , u2i dLRl Opl R2dg 6Rj l dEP

Laboratory References:

- nnT MID = nERfCt M2Li d, 3U33 W. F2R2L Avl , M2Li d, TX 79703, Tnk (4SU)704-G440

Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4449-1
SDG: 03C1558196

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-4449-1	SW24	Solid	03/28/23 12:10	03/30/23 13:40
890-4449-2	FS36	Solid	03/28/23 12:25	03/30/23 13:40
890-4449-3	FS37	Solid	03/28/23 12:30	03/30/23 13:40
890-4449-4	FS38	Solid	03/28/23 12:35	03/30/23 13:40

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Environment Testing
Xenco

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

Chain of Custody

Work Order No: 4449

www.xenco.com Page 1 of 1

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Prox. Code	
Project Number:	03C1558196	Due Date:			
Project Location:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:					
PO #:					
SAMPLE RECEIPT					
Samples Received In tact:	Yes	No	Thermometer ID:	11111111	
Cooler Custody Seals:	Yes	No	Correction Factor:	1.0.0	
Sample Custody Seals:	Yes	No	Temperature Reading:	1.8	
Total Containers:		Corrected Temperature:			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grav/Comp
SW24	S	3/20/23	1210	0-4	C
FS36			1225	4	C
FS37			1230	4	C
FS38			1235	4	C
CHLORIDES (EPA: 3000.0)					
TPH (8015)					
BTEX (8021)					
ANALYSIS REQUEST					
Preservative Codes					
None: NO DI Water: H ₂ O					
Cool: Cool MeOH: Me					
HCL: HC HNO ₃ : HN					
H ₂ SO ₄ : H ₂ NaOH: Na					
H ₃ PO ₄ : HP					
NaHSO ₄ : NABIS					
Na ₂ S ₂ O ₃ : NaSO ₃					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SAPC					
Sample Comments					
Incident ID:					
nAB1834656162					
Cost Center:					
1139851001					
AFE:					
PA 2022 04878 EXP 01					

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 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 \$95.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>[Signature]</i>	2 <i>[Signature]</i>	3/30/23 1:40	3 <i>[Signature]</i>	4 <i>[Signature]</i>	1340 3:30 23
5			6		

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4449-1

SDG Number: 03C1558196

Login Number: 4449

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4449-1

SDG Number: 03C1558196

Login Number: 4449

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/03/23 09:29 AM

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/10/2023 3:18:36 PM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4450-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
4/10/2023 3:18:36 PM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4450-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

Qualifiers

GC VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates tge analyte , as analywed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
S1z	Surrof ate recovery exceeds control limits+gif g biased.
U	Indicates tge analyte , as analywed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
U	Indicates tge analyte , as analywed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under tge "D" column to desif nate tgat tge result is reported on a dry , eif gt basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forminf Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalived 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 ohtge sample
DLC	Decision Level Concentration (Radiocgemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit ohDetection (DoD/DOE)
LOQ	Limit ohQuantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiocgemistry)
MDC	Minimum Detectable Concentration (Radiocgemistry)
MDL	Metgod Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Metgod Quantitation Limit
NC	Not Calculated
ND	Not Detected at tge reportinf limit (or MDL or EDL ihsgo, n)
NEG	Nef ative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiocgemistry)
RL	Reportinf Limit or Requested Limit (Radiocgemistry)
RPD	Relative Percent Difference+a measure ohtge relative difference bet, een t, o 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 420H

Job ID: 890-4450-1
SDG: 03C1558196

Job ID: 890-4450-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4450-1****Receipt**

The samples were received on 3/30/2023 1:40 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 1.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50258 and analytical batch 880-50561 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-50230 and analytical batch 880-50110 was outside the upper control limits.

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

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50480 and 880-50480 and analytical batch 880-50736 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. SW17 (890-4450-1), FS21 (890-4450-2), FS22 (890-4450-3) and SW18 (890-4450-4)

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50480 and analytical batch 880-50736 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. SW19 (890-4450-5), SW20 (890-4450-6), SW21 (890-4450-7), SW22 (890-4450-8), FS23 (890-4450-9), SW25 (890-4450-10), (890-4450-A-5-D MS) and (890-4450-A-5-E MSD)

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

Client Sample Results

Client Est uoinS
Project Code: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: S1 2P

Lab Sample ID: 890-4430-2

Date Cr lletotex: 0dd Pd d 20:03

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00205	U	0.00205	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C
Toimnt n	<0.00205	U	0.00205	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C
s Hyibnt znt n	<0.00205	U	0.00205	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C
S -Xyint n & p-Xyint n	<0.00406	U	0.00406	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C
o-Xyint n	<0.00205	U	0.00205	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C
Xyint nu, Toiai	<0.00406	U	0.00406	S g/Kg		04/05/25 C6:59	04/08/25 01:02	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	992		70 - 910	043D13 1 92:15	043D63 1 0 :0/	9
9D-i Fluorobenzene (Surr)	909		70 - 910	043D13 1 92:15	043D63 1 0 :0/	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai BTs X	<0.00406	U	0.00406	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai TPH	<49.8	U	49.8	S g/Kg			04/04/25 09:19	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoi n Rat gn Orgat eu	<49.8	U	49.8	S g/Kg		04/05/25 C4:1C	04/05/25 2C:14	C
(3 RO)-I 6-I O								
Douni Rat gn Orgat eu (Ovnr	<49.8	U	49.8	S g/Kg		04/05/25 C4:1C	04/05/25 2C:14	C
I O-I 28)								
Oli Rat gn Orgat eu (Ovnr I 28-I 56)	<49.8	U	49.8	S g/Kg		04/05/25 C4:1C	04/05/25 2C:14	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
9-Chlorooctane	901		70 - 910	043D13 1 94: 9	043D13 1 / 9: 4	9
o-Terphenyl	69		70 - 910	043D13 1 94: 9	043D13 1 / 9: 4	9

Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAphy - Sr lible

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	220		1.05	S g/Kg			04/08/25 C4:C2	C

Client Sample ID: FS/ 2

Lab Sample ID: 890-4430-/

Date Cr lletotex: 0dd Pd d 20:20

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C
Toimnt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C
s Hyibnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C
S -Xyint n & p-Xyint n	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C
o-Xyint n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C
Xyint nu, Toiai	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 06:26	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	992		70 - 910	043D13 1 92:15	043D63 1 02:/ 2	9
9D-i Fluorobenzene (Surr)	56		70 - 910	043D13 1 92:15	043D63 1 02:/ 2	9

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Client Sample Results

Client Est uoinS
Project Code: Poknr Lakn Ut 420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: FS/ 2

Lab Sample ID: 890-4430-/

Date Cr lletotex: 0dd Pd d 20:20

HatAM Sr lix

Date Reoeivex: 0dd0dd d 2d:40

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toñai BTsX	<0.00598	U	0.00598	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	3W4		49.9	S g/Kg			04/04/25 09:19	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoiñ n Rat gn Orgat eu	<49.9	U	49.9	S g/Kg		04/05/25 C4:1C	04/05/25 20:48	C
(3 RO)-I 6-I O								
Diesel RanOe VAOnios g/veA	3W4		49.9	S g/Kg		04/05/25 C4:1C	04/05/25 20:48	C
C20-C/ 8G								
Oli Rat gn Orgat eu (Ovnr I 28-I 56)	<49.9	U	49.9	S g/Kg		04/05/25 C4:1C	04/05/25 20:48	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	55		70 - 910			04/01/23 1 94:, 9	04/01/23 1 / 0:46	9
o-Terphenyl	60		70 - 910			04/01/23 1 94:, 9	04/01/23 1 / 0:46	9

Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Åxe	2d3		1.02	S g/Kg			04/08/25 C4:06	C

Client Sample ID: FS/ /

Lab Sample ID: 890-4430-d

Date Cr lletotex: 0dd Pd d 20:23

HatAM Sr lix

Date Reoeivex: 0dd0dd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
Toimnt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
sñyibnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
S-Xyint n & p-Xyint n	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
o-Xyint n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
Xyint nu, Toñai	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 06:47	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90,		70 - 910			04/01/23 1 92:15	04/06/23 1 02:47	9
9,10-di fluorobenzene (Surr)	906		70 - 910			04/01/23 1 92:15	04/06/23 1 02:47	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toñai BTsX	<0.00598	U	0.00598	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	23d		49.9	S g/Kg			04/04/25 C0:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoiñ n Rat gn Orgat eu	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 20:48	C
(3 RO)-I 6-I O								
Diesel RanOe VAOnios g/veA	23d		49.9	S g/Kg		04/05/25 C1:57	04/05/25 20:48	C
C20-C/ 8G								

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Client Sample Results

Int Est uoinS
ProjncE Gm: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: FS/ /

Lab Sample ID: 890-4430-d

Date Cr lletotex: 0dd Pd d 20:23

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRV Gg CGCr ntinueXG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Oli Rat gn Orgat eu (Ovnr l 28-l 56)	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 20:48	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	906		70 - 910			04313 1 9, :17	04313 1 / 0:46	9
o-Terphenyl	995		70 - 910			04313 1 9, :17	04313 1 / 0:46	9

Hethr x: XU d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	P30		4.97	S g/Kg			04/08/25 C4:2C	C

Client Sample ID: S1 28

Lab Sample ID: 890-4430-4

Date Cr lletotex: 0dd Pd d 2/ :03

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
Toimnt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
s Eyibnt znt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
S-Xyint n & p-Xyint n	<0.00402	U	0.00402	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
o-Xyint n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
Xyint nu, Toiai	<0.00402	U	0.00402	S g/Kg		04/05/25 C6:59	04/08/25 07:08	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	907		70 - 910			04313 1 92:15	04363 1 07:06	9
9-Fluorobenzene (Surr)	990		70 - 910			04313 1 92:15	04363 1 07:06	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai BTs X	<0.00402	U	0.00402	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRV Gg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	/ 09		49.9	S g/Kg			04/04/25 C0:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRV Gg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoi n Rat gn Orgat eu	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 2C:14	C
(3 RO)-l 6-l C0								
Diesel RanOe VAOnios g/veA	/ 09		49.9	S g/Kg		04/05/25 C1:57	04/05/25 2C:14	C
C20-C/ 8G								
Oli Rat gn Orgat eu (Ovnr l 28-l 56)	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 2C:14	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	57		70 - 910			04313 1 9, :17	04313 1 / 9:, 4	9
o-Terphenyl	905		70 - 910			04313 1 9, :17	04313 1 / 9:, 4	9

Hethr x: XU d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	3V2		4.96	S g/Kg			04/08/25 C4:21	C

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Client Sample Results

Client Est uoinS
Project Code: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: S1 29

Lab Sample ID: 890-4430-3

Date Cr lletotex: 0dd Pd d 2/ :20

HatAM Sr llix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C
Toimnt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C
s Hyibnt znt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C
S -Xyint n & p-Xyint n	<0.0040C	U	0.0040C	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C
o-Xyint n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C
Xyint nu, Toiai	<0.0040C	U	0.0040C	S g/Kg		04/05/25 C6:59	04/08/25 07:29	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	55		70 - 910	043D13 1 92:15	043D63 1 07:15	9
9D-i Fluorobenzene (Surr)	990		70 - 910	043D13 1 92:15	043D63 1 07:15	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai BTs X	<0.0040C	U	0.0040C	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	2P8		49.9	S g/Kg			04/04/25 C0:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoi n Rat gn Orgat eu (3 RO)-I 6-I O	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 22:C1	C
Diesel RanOe VAOnios g/veA C20-C/ 8G	2P8		49.9	S g/Kg		04/05/25 C1:57	04/05/25 22:C1	C
Oli Rat gn Orgat eu (Ovnr l 28-I 56)	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/05/25 22:C1	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
9-Chlorooctane	991		70 - 910	043D13 1 9, :17	043D13 1 / / :9,	9
o-Terphenyl	9/ ,		70 - 910	043D13 1 9, :17	043D13 1 / / :9,	9

Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	39/ F2		4.98	S g/Kg			04/08/25 C4:50	C

Client Sample ID: S1 / 0

Lab Sample ID: 890-4430-W

Date Cr lletotex: 0dd Pd d 2/ :23

HatAM Sr llix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C
Toimnt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C
s Hyibnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C
S -Xyint n & p-Xyint n	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C
o-Xyint n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C
Xyint nu, Toiai	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 07:49	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	902		70 - 910	043D13 1 92:15	043D63 1 07:45	9
9D-i Fluorobenzene (Surr)	990		70 - 910	043D13 1 92:15	043D63 1 07:45	9

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Client Sample Results

Int Est uoinS
 Projnc E Gm: Poknr Lakn Ut E420H

Job ID: 890-4410-C
 GD3 : 05I C118C96

Client Sample ID: S1 / 0

Lab Sample ID: 890-4430-W

Date Cr lletotex: 0dd Pd d 2/ :23

HatAM Sr lix

Date Reoeivex: 0dd0dd d 2d:40

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiäi BTs X	<0.00598	U	0.00598	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiäi TPH	<49.8	U	49.8	S g/Kg			04/04/25 00:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoiä n Rat gn Orgat eu	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:57	C
(3 RO)-I 6-I 00								
Dæuni Rat gn Orgat eu (Ovnr	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:57	C
I 00-I 28)								
Oli Rat gn Orgat eu (Ovnr I 28-I 56)	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:57	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	900		70 - 910			04/01/23 1 9, :17	04/01/23 1 11 :17	9
o-Terphenyl	906		70 - 910			04/01/23 1 9, :17	04/01/23 1 11 :17	9

Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Åxe	P02		1.04	S g/Kg			04/08/25 C4:45	C

Client Sample ID: S1 / 2

Lab Sample ID: 890-4430-P

Date Cr lletotex: 0dd Pd d 2d:d0

HatAM Sr lix

Date Reoeivex: 0dd0dd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
Toimt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
s äyibnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
S-Xyint n & p-Xyint n	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
o-Xyint n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
Xyint nu, Toiäi	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 08:00	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	907		70 - 910			04/01/23 1 92:15	04/06/23 1 06:90	9
9,10-di fluorobenzene (Surr)	50		70 - 910			04/01/23 1 92:15	04/06/23 1 06:90	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiäi BTs X	<0.00598	U	0.00598	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiäi TPH	<49.8	U	49.8	S g/Kg			04/04/25 00:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoiä n Rat gn Orgat eu	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:19	C
(3 RO)-I 6-I 00								
Dæuni Rat gn Orgat eu (Ovnr	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:19	C
I 00-I 28)								

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Client Sample Results

Int Est uoinS
ProjncE Gm: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: S1 / 2

Lab Sample ID: 890-4430-P

Date Cr lletotex: 0dd Pd d 2d:d0

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRV Gg CGCr ntinuexG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Oli Rat gn Orgat eu (Ovnr l 28-l 56)	<49.8	U	49.8	S g/Kg		04/05/25 C1:57	04/05/25 22:19	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	904		70 - 910			04313 1 9, :17	04313 1 / / : 5	9
o-Terphenyl	99,		70 - 910			04313 1 9, :17	04313 1 / / : 5	9

Hethr x: XU d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	P4.3		1.04	S g/Kg			04/08/25 C4:48	C

Client Sample ID: S1 / /

Lab Sample ID: 890-4430-8

Date Cr lletotex: 0dd Pd d 2d:40

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
Toimnt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
s Eyibnt znt n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
S-Xyint n & p-Xyint n	<0.00599	U	0.00599	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
o-Xyint n	<0.00200	U	0.00200	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
Xyint nu, Toiai	<0.00599	U	0.00599	S g/Kg		04/05/25 C6:59	04/08/25 08:5C	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	996		70 - 910			04313 1 92:15	04363 1 06:19	9
92-i fluorobenzene (Surr)	90,		70 - 910			04313 1 92:15	04363 1 06:19	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai BTs X	<0.00599	U	0.00599	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRV Gg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	P8.0		10.0	S g/Kg			04/04/25 C0:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRV Gg CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoi n Rat gn Orgat eu (3 RO)-l 6-l C0	<10.0	U	10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:2C	C
Diesel RanOe VAOnios g/veA C20-C/ 8G	P8.0		10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:2C	C
Oli Rat gn Orgat eu (Ovnr l 28-l 56)	<10.0	U	10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:2C	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
9-Chlorooctane	51		70 - 910			04313 1 9, :17	04313 1 / 1/: 9	9
o-Terphenyl	901		70 - 910			04313 1 9, :17	04313 1 / 1/: 9	9

Hethr x: XU d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	432		1.0C	S g/Kg			04/08/25 C1:02	C

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Client Sample Results

Client Est uoinS
Project Code: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: FS/ d

Lab Sample ID: 890-4430-9

Date Cr lleotex: 0dd Pd d 2d:43

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C
Toimnt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C
s thybnt znt n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C
S -Xyint n & p-Xyint n	<0.00402	U	0.00402	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C
o-Xyint n	<0.0020C	U	0.0020C	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C
Xyint nu, Toiai	<0.00402	U	0.00402	S g/Kg		04/05/25 C6:59	04/08/25 08:1C	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99/		70 - 910	043D13 1 92:15	043D63 1 06:, 9	9
9D-i fluorobenzene (Surr)	904		70 - 910	043D13 1 92:15	043D63 1 06:, 9	9

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Toiai BTs X	<0.00402	U	0.00402	S g/Kg			04/08/25 09:47	C

Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRV G CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Er tal EU7	93.8		10.0	S g/Kg			04/04/25 C0:02	C

Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRV G CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
3 auoi n Rat gn Orgat eu	<10.0	U	10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:45	C
(3 RO)-I 6-I O								
Diesel RanOe VAOnios g/veA	93.8		10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:45	C
C20-C/ 8G								
Oli Rat gn Orgat eu (Ovnr l 28-I 56)	<10.0	U	10.0	S g/Kg		04/05/25 C1:57	04/05/25 25:45	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
9-Chlorooctane	54		70 - 910	043D13 1 9, :17	043D13 1 / 1:41	9
o-Terphenyl	90,		70 - 910	043D13 1 9, :17	043D13 1 / 1:41	9

Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAphy - Sr luble

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Chlr Axe	P49		4.97	S g/Kg			04/08/25 C1:07	C

Client Sample ID: S1 / 3

Lab Sample ID: 890-4430-20

Date Cr lleotex: 0dd Pd d 23:03

HatAM Sr lix

Date Reoeivex: 0ddPd d 2d:40

Hethr x: S1 84W80/ 26 - Br latile VAOnio Cr mpr unxs g CG

) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao
Bnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C
Toimnt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C
s thybnt znt n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C
S -Xyint n & p-Xyint n	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C
o-Xyint n	<0.00C99	U	0.00C99	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C
Xyint nu, Toiai	<0.00598	U	0.00598	S g/Kg		04/05/25 C6:59	04/08/25 09:C2	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	994		70 - 910	043D13 1 92:15	043D63 1 05:9/	9
9D-i fluorobenzene (Surr)	905		70 - 910	043D13 1 92:15	043D63 1 05:9/	9

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Client Sample Results

Int Est uoinS
Project: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

Client Sample ID: S1 / 3
Date Cr lletotex: 0dd Pd d 23:03
Date Reoeivex: 0dd d d 2d:40

Lab Sample ID: 890-4430-20
HatAM Sr lix

Hethr x: E) L SVU Er tal 6 EX5 - Er tal 6 EX5 Caloulatir n									
) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao	
Toi BTsX	<0.00598	U	0.00598	S g/Kg			04/08/25 09:47	C	
Hethr x: S1 84W8023 NH - Diesel RanOe VAOnios gDRVGg CG									
) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao	
Toi TPH	<49.9	U	49.9	S g/Kg			04/04/25 00:02	C	
Hethr x: S1 84W80236 NH - Diesel RanOe VAOnios gDRVGg CG									
) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao	
3 auoi n Rat gn Orgat eu	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/04/25 00:04	C	
(3 RO)-I 6-I 00									
Deuni Rat gn Orgat eu (Ovnr	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/04/25 00:04	C	
I 00-I 28)									
Oli Rat gn Orgat eu (Ovnr I 28-I 56)	<49.9	U	49.9	S g/Kg		04/05/25 C1:57	04/04/25 00:04	C	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
9-Chlorooctane	997		70 - 910				043013 1 9, :17	043043 1 00:04	9
o-Terphenyl	910		70 - 910				043013 1 9, :17	043043 1 00:04	9
Hethr x: XU) d00.0 -) nir ns, Ir n ChA matr OAaphy - Sr luble									
) nalyte	Result	f ualiTeA	RL	Qnit	D	UAepaAex	) nalyzex	Dil Fao	
Chlr Axe	4/ .8		1.00	S g/Kg			04/08/25 C1:00	C	

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26595-A-1-E MS	Matrix Spike	104	102
880-26595-A-1-F MSD	Matrix Spike Duplicate	108	103
890-4430-1	S7 1W	116	101
890-4430-2	FS21	116	98
890-4430-5	FS22	103	108
890-4430-4	S7 18	10W	110
890-4430-3	S7 19	99	110
890-4430-6	S7 20	106	110
890-4430-W	S7 21	10W	90
890-4430-8	S7 22	118	103
890-4430-9	FS25	112	104
890-4430-10	S7 23	114	109
LCS 880-30238/1-A	Lab Control Sample	10W	100
LCSD 880-30238/2-A	Lab Control Sample Dup	105	100
MB 880-30238/3-A	Method Blank	98	90
MB 880-30365/3-A	Method Blank	95	90
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4430-1	S7 1W	105	81
890-4430-2	FS21	99	80
890-4430-2 MS	FS21	10W	V8
890-4430-2 MSD	FS21	103	V8
890-4430-5	FS22	108	119
890-4430-5 MS	FS22	153 S1+	15WS1+
890-4430-5 MSD	FS22	11W	11W
890-4430-4	S7 18	9W	109
890-4430-3	S7 19	115	123
890-4430-6	S7 20	100	108
890-4430-W	S7 21	104	113
890-4430-8	S7 22	95	105
890-4430-9	FS25	94	103
890-4430-10	S7 23	11W	150
LCS 880-30215/2-A	Lab Control Sample	126	95
LCS 880-30250/2-A	Lab Control Sample	109	116
LCSD 880-30215/5-A	Lab Control Sample Dup	105	V6
LCSD 880-30250/5-A	Lab Control Sample Dup	104	113
MB 880-30215/1-A	Method Blank	121	102
MB 880-30250/1-A	Method Blank	150	146 S1+
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Eurofins Carlsbad

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50258/5-A

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50258

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/05/25 16:59	04/08/25 01:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/05/25 16:59	04/08/25 01:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/05/25 16:59	04/08/25 01:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/05/25 16:59	04/08/25 01:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/05/25 16:59	04/08/25 01:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/05/25 16:59	04/08/25 01:54	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	10		73 - / 23	349829 2 / D,21	349809 2 3 / ,24	/
i4-Chlorobenzene (Surr)	13		73 - / 23	349829 2 / D,21	349809 2 3 / ,24	/

Lab Sample ID: LCS 880-50258/1-A

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50258

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.07894		mg/Kg		79	70 - 150
Toluene	0.100	0.08517		mg/Kg		85	70 - 150
Ethylbenzene	0.100	0.08473		mg/Kg		83	70 - 150
m-Xylene & p-Xylene	0.200	0.1724		mg/Kg		86	70 - 150
o-Xylene	0.100	0.07979		mg/Kg		80	70 - 150

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	/ 37		73 - / 23
i4-Chlorobenzene (Surr)	/ 33		73 - / 23

Lab Sample ID: LCSD 880-50258/2-A

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50258

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.08559		mg/Kg		85	70 - 150	3	53
Toluene	0.100	0.08637		mg/Kg		87	70 - 150	4	53
Ethylbenzene	0.100	0.08969		mg/Kg		90	70 - 150	6	53
m-Xylene & p-Xylene	0.200	0.1831		mg/Kg		95	70 - 150	7	53
o-Xylene	0.100	0.08427		mg/Kg		84	70 - 150	3	53

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	/ 32		73 - / 23
i4-Chlorobenzene (Surr)	/ 33		73 - / 23

Lab Sample ID: 880-26393-A-1-E MS

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00201	U f 1	0.101	0.04736	f 1	mg/Kg		47	70 - 150
Toluene	<0.00201	U f 1	0.101	0.04445	f 1	mg/Kg		44	70 - 150

Eurodns CarlsbaF

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

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

Lab Sample ID: 880-26393-A-1-E MS

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50258

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylbenzene	<0.00201	U f 1	0.101	0.06038	f 1	mg/Kg		60	70 - 150
m-Xylene & p-Xylene	<0.00402	U f 1	0.202	0.1195	f 1	mg/Kg		39	70 - 150
o-Xylene	<0.00201	U f 1	0.101	0.03813	f 1	mg/Kg		38	70 - 150

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	/ 34		73 - / 23
/ i4-Chlorobenzene (Surr)	/ 3:		73 - / 23

Lab Sample ID: 880-26393-A-1-F MSD

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 50258

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00201	U f 1	0.0996	0.03023	f 1	mg/Kg		30	70 - 150	3	53
Toluene	<0.00201	U f 1	0.0996	0.04869	f 1	mg/Kg		49	70 - 150	9	53
Ethylbenzene	<0.00201	U f 1	0.0996	0.07115		mg/Kg		71	70 - 150	16	53
m-Xylene & p-Xylene	<0.00402	U f 1	0.199	0.1449		mg/Kg		75	70 - 150	19	53
o-Xylene	<0.00201	U f 1	0.0996	0.06874	f 1	mg/Kg		69	70 - 150	17	53

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	/ 30		73 - / 23
/ i4-Chlorobenzene (Surr)	/ 3c		73 - / 23

Lab Sample ID: MB 880-50563/5-A

Matrix: Solid

Analysis Batch: 50561

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50563

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/07/25 08:34	04/07/25 14:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/07/25 08:34	04/07/25 14:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/07/25 08:34	04/07/25 14:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/07/25 08:34	04/07/25 14:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/07/25 08:34	04/07/25 14:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/07/25 08:34	04/07/25 14:31	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	12		73 - / 23	34979 2 30,c4	34979 2 / 4,c/	/
/ i4-Chlorobenzene (Surr)	13		73 - / 23	34979 2 30,c4	34979 2 / 4,c/	/

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

Lab Sample ID: MB 880-50213/1-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50213

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<30.0	U	30.0	mg/Kg		04/05/25 14:31	04/05/25 19:42	1

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

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

Lab Sample ID: MB 880-50213/1-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50213

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<30.0	U	30.0	mg/Kg		04/05/25 14:31	04/05/25 19:42	1
Oil Range Organics (Over C28-C56)	<30.0	U	30.0	mg/Kg		04/05/25 14:31	04/05/25 19:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
/-t aloroo85Tne	/ : /		73 - / 23			34929 2 / 4,c/	34929 2 / 1,4:	/
o-peryaen6l	/ 3:		73 - / 23			34929 2 / 4,c/	34929 2 / 1,4:	/

Lab Sample ID: LCS 880-50213/2-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50213

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	865.4		mg/Kg		86	70 - 150
Diesel Range Organics (Over C10-C28)	1000	886.6		mg/Kg		89	70 - 150
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
/-t aloroo85Tne	/ : D		73 - / 23				
o-peryaen6l	12		73 - / 23				

Lab Sample ID: LCSD 880-50213/3-A

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50213

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	903.7		mg/Kg		91	70 - 150	3	20
Diesel Range Organics (Over C10-C28)	1000	928.5		mg/Kg		95	70 - 150	3	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
/-t aloroo85Tne	/ 32		73 - / 23						
o-peryaen6l	7D		73 - / 23						

Lab Sample ID: 890-4450-2 MS

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: FS21

Prep Type: Total/NA

Prep Batch: 50213

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	993	1117		mg/Kg		109	70 - 150
Diesel Range Organics (Over C10-C28)	36.4		993	882.2		mg/Kg		85	70 - 150
Surrogate	MS %Recovery	MS Qualifier	Limits						
/-t aloroo85Tne	/ 37		73 - / 23						
o-peryaen6l	7c		73 - / 23						

Eurodns CarlsbaF

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

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

Lab Sample ID: 890-4450-2 MSD

Matrix: Solid

Analysis Batch: 50112

Client Sample ID: FS21

Prep Type: Total/NA

Prep Batch: 50213

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	1156		mg/Kg		110	70 - 150	2	20
Diesel Range Organics (Over C10-C28)	36.4		999	885.6		mg/Kg		85	70 - 150	0	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
/-t aloroo85Tne	/ 3c		73 - / 23								
o-peryaen6l	7c		73 - / 23								

Lab Sample ID: MB 880-50230/1-A

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50230

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<30.0	U	30.0	mg/Kg		04/05/25 13:57	04/05/25 19:42	1
Diesel Range Organics (Over C10-C28)	<30.0	U	30.0	mg/Kg		04/05/25 13:57	04/05/25 19:42	1
Oil Range Organics (Over C28-C56)	<30.0	U	30.0	mg/Kg		04/05/25 13:57	04/05/25 19:42	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
/-t aloroo85Tne	/ 23		73 - / 23			34929 2 / c,27	34929 2 / 1,4:	/
o-peryaen6l	/ 4D	S/+	73 - / 23			34929 2 / c,27	34929 2 / 1,4:	/

Lab Sample ID: LCS 880-50230/2-A

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Gasoline Range Organics (GRO)-C6-C10	1000	977.0		mg/Kg		98	70 - 150	
Diesel Range Organics (Over C10-C28)	1000	879.9		mg/Kg		88	70 - 150	
Surrogate	LCS %Recovery	LCS Qualifier	Limits					
/-t aloroo85Tne	/ 31		73 - / 23					
o-peryaen6l	// D		73 - / 23					

Lab Sample ID: LCSD 880-50230/3-A

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50230

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	810.2		mg/Kg		81	70 - 150	19	20
Diesel Range Organics (Over C10-C28)	1000	837.8		mg/Kg		86	70 - 150	5	20

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

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

Lab Sample ID: LCSD 880-50230/3-A

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50230

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
/-t aloroo85Tne	/ 34		73 - / 23
o-peryaen6l	// c		73 - / 23

Lab Sample ID: 890-4450-3 MS

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: FS22

Prep Type: Total/NA

Prep Batch: 50230

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	1170		mg/Kg		113	70 - 150	
Diesel Range Organics (Over C10-C28)	135		998	1209		mg/Kg		106	70 - 150	
Surrogate	%Recovery	Qualifier	Limits							
/-t aloroo85Tne	/ 2c	S/ +	73 - / 23							
o-peryaen6l	/ 27	S/ +	73 - / 23							

Lab Sample ID: 890-4450-3 MSD

Matrix: Solid

Analysis Batch: 50110

Client Sample ID: FS22

Prep Type: Total/NA

Prep Batch: 50230

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	994.8		mg/Kg		97	70 - 150	16	20	
Diesel Range Organics (Over C10-C28)	135		999	1031		mg/Kg		90	70 - 150	14	20	
Surrogate	%Recovery	Qualifier	Limits									
/-t aloroo85Tne	// 7		73 - / 23									
o-peryaen6l	// 7		73 - / 23									

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50480/1-A

Matrix: Solid

Analysis Batch: 50736

Client Sample ID: Method Blank

Prep Type: Soluble

	MB	MB								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac	
ChloriFe	<3.00	U	3.00	mg/Kg			04/08/25 12:49		1	

Lab Sample ID: LCS 880-50480/2-A

Matrix: Solid

Analysis Batch: 50736

Client Sample ID: Lab Control Sample

Prep Type: Soluble

	Spike	LCS	LCS						%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
ChloriFe	230	258.4		mg/Kg		93	90 - 110			

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4430-1
SDG: 05C1338196

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 880-50480/3-A				Client Sample ID: Lab Control Sample Dup							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50736											
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ChloriFe			230	258.5		mg/Kg		93	90 - 110	0	20

Lab Sample ID: 890-4450-5 MS				Client Sample ID: SW19							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50736											
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
ChloriFe	392	f 1	249	750.0	f 1	mg/Kg		33	90 - 110		

Lab Sample ID: 890-4450-5 MSD				Client Sample ID: SW19							
Matrix: Solid				Prep Type: Soluble							
Analysis Batch: 50736											
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
ChloriFe	392	f 1	249	755.4	f 1	mg/Kg		37	90 - 110	0	20

QC Association Summary

Client Est uoinS
Project ID: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

GC VOA

Prep Batch: 50258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Dai/AM	Goied	1051	
890-4410-2	BG2C	Nb Dai/AM	Goied	1051	
890-4410-5	BG22	Nb Dai/AM	Goied	1051	
890-4410-4	GF C8	Nb Dai/AM	Goied	1051	
890-4410-1	GF C9	Nb Dai/AM	Goied	1051	
890-4410-6	GF 20	Nb Dai/AM	Goied	1051	
890-4410-T	GF 2C	Nb Dai/AM	Goied	1051	
890-4410-8	GF 22	Nb Dai/AM	Goied	1051	
890-4410-9	BG25	Nb Dai/AM	Goied	1051	
890-4410-C0	GF 21	Nb Dai/AM	Goied	1051	
h p 880-10218/1-M	h nEod piat k	Nb Dai/AM	Goied	1051	
LI G 880-10218/C-M	Lab l ot Eoi GaS xin	Nb Dai/AM	Goied	1051	
LI GD 880-10218/2-M	Lab l ot Eoi GaS xin Dmx	Nb Dai/AM	Goied	1051	
880-26595-MC-s h G	h aEeK Gxkn	Nb Dai/AM	Goied	1051	
880-26595-MC-B h GD	h aEeK Gxkn DmxieaE	Nb Dai/AM	Goied	1051	

Analysis Batch: 50561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Dai/AM	Goied	802Qp	10218
890-4410-2	BG2C	Nb Dai/AM	Goied	802Qp	10218
890-4410-5	BG22	Nb Dai/AM	Goied	802Qp	10218
890-4410-4	GF C8	Nb Dai/AM	Goied	802Qp	10218
890-4410-1	GF C9	Nb Dai/AM	Goied	802Qp	10218
890-4410-6	GF 20	Nb Dai/AM	Goied	802Qp	10218
890-4410-T	GF 2C	Nb Dai/AM	Goied	802Qp	10218
890-4410-8	GF 22	Nb Dai/AM	Goied	802Qp	10218
890-4410-9	BG25	Nb Dai/AM	Goied	802Qp	10218
890-4410-C0	GF 21	Nb Dai/AM	Goied	802Qp	10218
h p 880-10218/1-M	h nEod piat k	Nb Dai/AM	Goied	802Qp	10218
h p 880-10165/1-M	h nEod piat k	Nb Dai/AM	Goied	802Qp	10165
LI G 880-10218/C-M	Lab l ot Eoi GaS xin	Nb Dai/AM	Goied	802Qp	10218
LI GD 880-10218/2-M	Lab l ot Eoi GaS xin Dmx	Nb Dai/AM	Goied	802Qp	10218
880-26595-MC-s h G	h aEeK Gxkn	Nb Dai/AM	Goied	802Qp	10218
880-26595-MC-B h GD	h aEeK Gxkn DmxieaE	Nb Dai/AM	Goied	802Qp	10218

Prep Batch: 50563

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
h p 880-10165/1-M	h nEod piat k	Nb Dai/AM	Goied	1051	

Analysis Batch: 50668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-2	BG2C	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-5	BG22	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-4	GF C8	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-1	GF C9	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-6	GF 20	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-T	GF 2C	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-8	GF 22	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-9	BG25	Nb Dai/AM	Goied	Nb Dai pNs W	
890-4410-C0	GF 21	Nb Dai/AM	Goied	Nb Dai pNs W	

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QC Association Summary

Int Est uoinS
Projnc E Cn: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

GC Semi VOA

Analysis Batch: 50110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-5	BG22	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-4	GF C8	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-1	GF C9	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-6	GF 20	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-T	GF 2C	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-8	GF 22	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-9	BG25	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-Q0	GF 21	Nb Fai/AM	Goied	80C1p Ah	10250
h p 880-10250/C-M	h nEod piat k	Nb Fai/AM	Goied	80C1p Ah	10250
LI G 880-10250/2-M	Lab l ot Eoi GaS xin	Nb Fai/AM	Goied	80C1p Ah	10250
LI GD 880-10250/5-M	Lab l ot Eoi GaS xin Dmx	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-5 h G	BG22	Nb Fai/AM	Goied	80C1p Ah	10250
890-4410-5 h GD	BG22	Nb Fai/AM	Goied	80C1p Ah	10250

Analysis Batch: 50112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Fai/AM	Goied	80C1p Ah	102C5
890-4410-2	BG2C	Nb Fai/AM	Goied	80C1p Ah	102C5
h p 880-102C5/C-M	h nEod piat k	Nb Fai/AM	Goied	80C1p Ah	102C5
LI G 880-102C5/2-M	Lab l ot Eoi GaS xin	Nb Fai/AM	Goied	80C1p Ah	102C5
LI GD 880-102C5/5-M	Lab l ot Eoi GaS xin Dmx	Nb Fai/AM	Goied	80C1p Ah	102C5
890-4410-2 h G	BG2C	Nb Fai/AM	Goied	80C1p Ah	102C5
890-4410-2 h GD	BG2C	Nb Fai/AM	Goied	80C1p Ah	102C5

Prep Batch: 50213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-2	BG2C	Nb Fai/AM	Goied	80C1Ah Prnx	
h p 880-102C5/C-M	h nEod piat k	Nb Fai/AM	Goied	80C1Ah Prnx	
LI G 880-102C5/2-M	Lab l ot Eoi GaS xin	Nb Fai/AM	Goied	80C1Ah Prnx	
LI GD 880-102C5/5-M	Lab l ot Eoi GaS xin Dmx	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-2 h G	BG2C	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-2 h GD	BG2C	Nb Fai/AM	Goied	80C1Ah Prnx	

Prep Batch: 50230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-5	BG22	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-4	GF C8	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-1	GF C9	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-6	GF 20	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-T	GF 2C	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-8	GF 22	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-9	BG25	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-Q0	GF 21	Nb Fai/AM	Goied	80C1Ah Prnx	
h p 880-10250/C-M	h nEod piat k	Nb Fai/AM	Goied	80C1Ah Prnx	
LI G 880-10250/2-M	Lab l ot Eoi GaS xin	Nb Fai/AM	Goied	80C1Ah Prnx	
LI GD 880-10250/5-M	Lab l ot Eoi GaS xin Dmx	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-5 h G	BG22	Nb Fai/AM	Goied	80C1Ah Prnx	
890-4410-5 h GD	BG22	Nb Fai/AM	Goied	80C1Ah Prnx	

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QC Association Summary

Int Est uoinS
Project: Poknr Lakn Ut E420H

Job ID: 890-4410-C
GD3 : 05I C118C96

GC Semi VOA

Analysis Batch: 50299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Nb Dai/AM	Goied	80C1 Ah	
890-4410-2	BG2C	Nb Dai/AM	Goied	80C1 Ah	
890-4410-5	BG22	Nb Dai/AM	Goied	80C1 Ah	
890-4410-4	GF C8	Nb Dai/AM	Goied	80C1 Ah	
890-4410-1	GF C9	Nb Dai/AM	Goied	80C1 Ah	
890-4410-6	GF 20	Nb Dai/AM	Goied	80C1 Ah	
890-4410-T	GF 2C	Nb Dai/AM	Goied	80C1 Ah	
890-4410-8	GF 22	Nb Dai/AM	Goied	80C1 Ah	
890-4410-9	BG25	Nb Dai/AM	Goied	80C1 Ah	
890-4410-Q0	GF 21	Nb Dai/AM	Goied	80C1 Ah	

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Leach Batch: 50480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Goinbin	Goied	DI Lnac7	
890-4410-2	BG2C	Goinbin	Goied	DI Lnac7	
890-4410-5	BG22	Goinbin	Goied	DI Lnac7	
890-4410-4	GF C8	Goinbin	Goied	DI Lnac7	
890-4410-1	GF C9	Goinbin	Goied	DI Lnac7	
890-4410-6	GF 20	Goinbin	Goied	DI Lnac7	
890-4410-T	GF 2C	Goinbin	Goied	DI Lnac7	
890-4410-8	GF 22	Goinbin	Goied	DI Lnac7	
890-4410-9	BG25	Goinbin	Goied	DI Lnac7	
890-4410-Q0	GF 21	Goinbin	Goied	DI Lnac7	
h p 880-10480/C-M	h nEod piat k	Goinbin	Goied	DI Lnac7	
LI G 880-10480/2-M	Lab l ot Eoi GaS xin	Goinbin	Goied	DI Lnac7	
LI GD 880-10480/5-M	Lab l ot Eoi GaS xin Dmx	Goinbin	Goied	DI Lnac7	
890-4410-1 h G	GF C9	Goinbin	Goied	DI Lnac7	
890-4410-1 h GD	GF C9	Goinbin	Goied	DI Lnac7	

Analysis Batch: 50736

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4410-C	GF CT	Goinbin	Goied	500.0	10480
890-4410-2	BG2C	Goinbin	Goied	500.0	10480
890-4410-5	BG22	Goinbin	Goied	500.0	10480
890-4410-4	GF C8	Goinbin	Goied	500.0	10480
890-4410-1	GF C9	Goinbin	Goied	500.0	10480
890-4410-6	GF 20	Goinbin	Goied	500.0	10480
890-4410-T	GF 2C	Goinbin	Goied	500.0	10480
890-4410-8	GF 22	Goinbin	Goied	500.0	10480
890-4410-9	BG25	Goinbin	Goied	500.0	10480
890-4410-Q0	GF 21	Goinbin	Goied	500.0	10480
h p 880-10480/C-M	h nEod piat k	Goinbin	Goied	500.0	10480
LI G 880-10480/2-M	Lab l ot Eoi GaS xin	Goinbin	Goied	500.0	10480
LI GD 880-10480/5-M	Lab l ot Eoi GaS xin Dmx	Goinbin	Goied	500.0	10480
890-4410-1 h G	GF C9	Goinbin	Goied	500.0	10480
890-4410-1 h GD	GF C9	Goinbin	Goied	500.0	10480

s mrof e u l ariubad

Lab Chronicle

Client: Ensolum
1 Røj tđ ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4430-2
/ DG: 05C2338296

Client Sample ID: SF 05
Date Collectex: 9d/25/2d 09:93
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-0
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Bpreparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			4.95 g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 03:0U	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 09:39	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.04 g	20 mk	30U25	0405dJ5 24:32	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	3022U	0405dJ5 U2:34	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.97 g	30 mk	30480	0406dJ5 20:26	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:2U	/ MC	EET MID

Client Sample ID: NS20
Date Collectex: 9d/25/2d 09:09
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-2
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Bpreparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.0U g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 06:U6	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 09:39	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.05 g	20 mk	30U25	0405dJ5 24:32	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	3022U	0405dJ5 U0:48	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.98 g	30 mk	30480	0406dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:26	/ MC	EET MID

Client Sample ID: NS22
Date Collectex: 9d/25/2d 09:03
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-d
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Bpreparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.05 g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 06:47	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.05 g	20 mk	30U50	0405dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	0405dJ5 U0:48	/ M	EET MID
/ oluble	keLj h	DI keLj h			3.05 g	30 mk	30480	0406dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:U2	/ MC	EET MID

Client Sample ID: SF 0A
Date Collectex: 9d/25/2d 02:93
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-4
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Bpreparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			4.97 g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 07:08	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID

EuRōins CLRSbLf

Lab Chronicle

Client: Ensolum
1 Røj tđ ite: 1 oSePkLSe a nit 4UOH

Job ID: 890-4430-2
/ DG: 05C2338296

Client Sample ID: SF 0A
Date Collectex: 9d/25/2d 02:93
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-4
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.0Ug	20 mk	30U50	0405dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	0405dJ5 U2:34	/ M	EET MID
/ oluble	keLj h	DI keLj h			3.04 g	30 mk	30480	0406dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:U8	/ MC	EET MID

Client Sample ID: SF 08
Date Collectex: 9d/25/2d 02:09
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-3
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			4.99 g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 07:U9	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.05 g	20 mk	30U50	0405dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	0405dJ5 UJ:23	/ M	EET MID
/ oluble	keLj h	DI keLj h			3.0Ug	30 mk	30480	0406dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:50	/ MC	EET MID

Client Sample ID: SF 29
Date Collectex: 9d/25/2d 02:03
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-7
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.0Ug	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 07:49	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.04 g	20 mk	30U50	0405dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	0405dJ5 UJ:57	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.96 g	30 mk	30480	0406dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	0408dJ5 24:45	/ MC	EET MID

Client Sample ID: SF 20
Date Collectex: 9d/25/2d 0d:d9
Date Receivex: 9d/d9/2d 0d:49

Lab Sample ID: A89-4439-5
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.05 g	3 mk	30U38	0405dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	0408dJ5 08:20	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	0408dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	0404dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.03 g	20 mk	30U50	0405dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	0405dJ5 UJ:39	/ M	EET MID

EuRōins CLRSbLf

Lab Chronicle

Client: Ensolum
1 Røj tđ ite: 1 oSePkLSe a nit 4UOH

Job ID: 890-4430-2
/ DG: 05C2338296

Client Sample ID: SF 20

Lab Sample ID: A89-4439-5

Date Collectex: 9d/25/2d 0d:d9

1 atriM Solix

Date Receivex: 9d/d9/2d 0d:49

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
/ oluble	keLj h	DI keLj h			4.96 g	30 mk	30480	04d06dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	04d08dJ5 24:48	/ MC	EET MID

Client Sample ID: SF 22

Lab Sample ID: A89-4439-A

Date Collectex: 9d/25/2d 0d:49

1 atriM Solix

Date Receivex: 9d/d9/2d 0d:49

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.02 g	3 mk	30U38	04d05dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	04d08dJ5 08:52	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	04d08dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	04d04dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.00 g	20 mk	30U50	04d05dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	04d05dJ5 U5:U2	/ M	EET MID
/ oluble	keLj h	DI keLj h			4.99 g	30 mk	30480	04d06dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	04d08dJ5 23:0U	/ MC	EET MID

Client Sample ID: NS2d

Lab Sample ID: A89-4439-8

Date Collectex: 9d/25/2d 0d:43

1 atriM Solix

Date Receivex: 9d/d9/2d 0d:49

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			4.97 g	3 mk	30U38	04d05dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	04d08dJ5 08:32	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	04d08dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	04d04dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.02 g	20 mk	30U50	04d05dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	04d05dJ5 U5:45	/ M	EET MID
/ oluble	keLj h	DI keLj h			3.05 g	30 mk	30480	04d06dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	04d08dJ5 23:07	/ MC	EET MID

Client Sample ID: SF 23

Lab Sample ID: A89-4439-09

Date Collectex: 9d/25/2d 03:93

1 atriM Solix

Date Receivex: 9d/d9/2d 0d:49

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
TotLidNA	1 Rēp	3053			3.0U g	3 mk	30U38	04d05dJ5 26:59	MNR	EET MID
TotLidNA	AnLlysis	80U2B		2	3 mk	3 mk	30362	04d08dJ5 09:2U	/ M	EET MID
TotLidNA	AnLlysis	TotLI BTEX		2			30668	04d08dJ5 09:47	/ M	EET MID
TotLidNA	AnLlysis	8023 NM		2			30U99	04d04dJ5 20:0U	/ M	EET MID
TotLidNA	1 Rēp	8023NM 1 Rēp			20.05 g	20 mk	30U50	04d05dJ5 23:57	AJ	EET MID
TotLidNA	AnLlysis	8023B NM		2	2 uk	2 uk	30220	04d04dJ5 00:04	/ M	EET MID
/ oluble	keLj h	DI keLj h			3 g	30 mk	30480	04d06dJ5 20:27	K/	EET MID
/ oluble	AnLlysis	500.0		2	30 mk	30 mk	30756	04d08dJ5 23:22	/ MC	EET MID

EuRōins CLRsblf

Lab Chronicle

Client: Ensolum
1 Prej tē ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4430-2
/ DG: 05C2338296

LaboratorT References:
EET MID d EuRōins Mif ILnf , 2U22 W. FloRf L Ave, Mif ILnf , TX 79702, TEk (45U)704-3440

- 1
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Accreditation/Certification Summary

Client: Ensolum
1 Pørej tð ite: 1 oSePkLSe a nit 4U0H

Job ID: 890-4430-2
/ DG: 05C2338296

Laboratory: Eurofins Midland

a nless otheRwise noted, LI LnLlytes foPthis ILboR.toPy weR j oveRð undePeLj h Lj j ReditLtionð eRtifi j Ltion below.

Authority	Program	Identification Number	Expiration Date
TexLs	NEkA1	T204704400-UU-U3	06-50-U5
The following LnLlytes LR inj luded in this RepoR, but the ILboR.toPy is not j eRified by the goveRning LuthoRty. This list mLy inj lude LnLlytes foPwhij h the Lgenj y does not offePj eRtifi j Ltion.			
AnLlysis Method	1 Rep Method	MLtRx	AnLlyte
8023 NM		/ olid	TotLI T1 H
TotLI BTEX		/ olid	TotLI BTEX

Method Summary

1 0 en t eEoGu
6 Rri j rmi : 6 o/i PkL/i a eln4U0H

Job ID: 890-4430-2
mDS: 0G1 2338295

Method	Method Description	Protocol	Laboratory
80L2B	VoCnC ORjLelj 1 ou posedE(S1)	mW845	t t T MID
TorLCBTt X	TorLCBTt X 1 LQsCrtoe	TAk mO6	t t T MID
8023 NM	Dli Ei CRLegi ORjLelj E(DRO) (S1)	mW845	t t T MID
8023B NM	Dli Ei CRLegi ORjLelj E(DRO) (S1)	mW845	t t T MID
G00.0	AeloeE, loe 1 hRu LrögRlphy	t 6A	t t T MID
30G3	1 0E d myEri u 6sRji Led TRlp	mW845	t t T MID
8023NM 6R p	Mlj Rbi xrRj rtoe	mW845	t t T MID
DI ki Lj h	Di loelzi d WLri Pki Lj hleg 6Rji dsR	AmTM	t t T MID

Protocol References:

AmTM = AmTM leri RlrlloeLC
t 6A = a mt evlRœu i erLC6 Rri j rtœ Agi ej y
mW845 = "Ti EnMi rhodEFoPt vLGLrlleg mœl WLEri , 6hyBj LQl hi u lj LQMi rhodE", ThIRl t dlrloe, Novi u bi P2985 Aed IrEapdLri E
TAk mO6 = Ti ErAu i Rj L kLboR.roR E, mLedLRl Opi Rrlleg 6Rji dsR

Laboratory References:

t t T MID = t sRfleEMldCed, 2U22 W. FØRdL Avi , MldCed, TX 79702, Tt k (4GU)704-3440

Sample Summary

Client: Ensolum
Project/Gite: Poker Lake Unit 420H

Job ID: 890-4410-S
GD3 : 05CS118S96

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-4410-S	GWSd	GoliF	05/2d/25 S0:01	05/50/25 S5:40
890-4410-2	7G2S	GoliF	05/2d/25 S0:S0	05/50/25 S5:40
890-4410-5	7G22	GoliF	05/2d/25 S0:S1	05/50/25 S5:40
890-4410-4	GWS8	GoliF	05/2d/25 S2:01	05/50/25 S5:40
890-4410-1	GWS9	GoliF	05/2d/25 S2:S0	05/50/25 S5:40
890-4410-6	GW20	GoliF	05/2d/25 S2:S1	05/50/25 S5:40
890-4410-d	GW2S	GoliF	05/2d/25 S5:50	05/50/25 S5:40
890-4410-8	GW22	GoliF	05/2d/25 S5:40	05/50/25 S5:40
890-4410-9	7G25	GoliF	05/2d/25 S5:41	05/50/25 S5:40
890-4410-S0	GW21	GoliF	05/2d/25 S1:01	05/50/25 S5:40

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0000
Midland, TX (432) 704-5440, San Antonio, TX (210) 506-3304
El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3189



Environmental Testing
Xenoco

Work Order No: 4450

Project Manager: Tacoma Morrissey		Bill to: (if different) Garrett Green		www.xenoco.com Page 1 of 1	
Company Name: Ensolum		Company Name: XTO Energy		Work Order Comments	
Address: 3122 National Parks Hwy		Address: 3104 E. Green St.		Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
City, State ZIP: Carlsbad, NM 88220		City, State ZIP: Carlsbad, NM 88220		State of Project: Reporting: Level I ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Phone: 303-887-2946		Email: Garrett.Green@ExxonMobil.com		Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name: Poker Lake Unit 420H		Turn Around		ANALYSIS REQUEST		Preservative Codes	
Project Number: 03C1558196	☒ Routine ☐ Rush	Due Date:		None: NO		DI Water: H ₂ O	
Project Location: Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm	Wet Ice: ☒ Yes ☐ No		Cool: Cool		MeOH: Me	
PO #: SAMPLE RECEIPT	Temp Blank: ☒ Yes ☐ No	Thermometer ID: 100009		HCL: HC		HNO ₃ : HN	
Samples Received Intact: ☒ Yes ☐ No	Correction Factor: -0.3	Temperature Reading: 1.0		H ₂ SO ₄ : H ₂		NaOH: Na	
Cooler Custody Seals: ☒ Yes ☐ No	Corrected Temperature: 1.0			H ₃ PO ₄ : HP		NaHSO ₄ : NABIS	
Sample Custody Seals: ☒ Yes ☐ No				Na ₂ S ₂ O ₃ : NaSO ₃		Zn Acetate+NaOH: Zn	
Total Containers:				NaOH+Ascorbic Acid: SAPC			

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters	Proa. Code	Sample Comments
SW17	S	3/22/23	10:05	0-3'	C	1	CHLORIDES (EPA: 3000.0)		Incident ID: nAB1834656162
SW21			10:10	3'		1	TPH (8015)		
SW22			10:15	3'		1	BTEX (8021)		
SW18			12:05	0-3'		1			Cost Center: 1139851001
SW19			12:10	0-3'		1			AFE: PA 2022 04878 EXP 01
SW20			12:15	0-3'		1			
SW21			1:30	0-4'		1			
SW22			1:40	0-4'		1			
SW23			1:45	3'		1			
SW25			3:05	0-4'		1			

Total 200.7 / 6010 200.8 / 6020:		BRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Si Ti Sn U V Zn	
Circle Method(s) and Metal(s) to be analyzed		TCPL / SPLP 6010: BRCRA 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 Xeno, its affiliates and subcontractors. If assigns standard terms and conditions for service. Eurofins Xeno 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 Xeno. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xeno, 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>Connor</i>	<i>McOrnel</i>	3/23/23 1:40	<i>Clay</i>		3/30/23 3:30

Revised Date: 06/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4410-S

DG3 Number: 05CS118S96

Login Number: 4450

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Carlsbad

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Dample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Damples 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 Dampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Damples are received within Holding Time (excluding tests with immediate HTs)	True	
Dample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Dample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Dample bottles are completely filled.	True	
Dample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MD/MDGs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (S/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4410-S

DG3 Number: 05CS118S96

Login Number: 4450

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/03/23 09:29 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Dample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Damples 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 Dampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Damples are received within Holding Time (excluding tests with immediate HTs)	True	
Dample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Dample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Dample bottles are completely filled.	True	
Dample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MD/MDGs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (S/4").	N/A	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/10/2023 2:23:43 PM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4452-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

Eurofins Carlsbad**Job Notes**

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

Authorization

Generated
4/10/2023 2:23:43 PM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4452-1
SDG: 03C1558196

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Definitions/Glossary

Internet
rjoo/EGG: r oLnj aULn 2t e410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Qualifiers

GC VOA

Qualifier	Qualifier Description
FC	MG Ut dloj MGD jn/ ovnyj nx/ ndu / ot foi ies .
F1	MGMGD gr D nx/ ndu / ot foi ies .
GC-	Gnjjo, U n jn/ ovnyj nx/ ndu / ot foi ies .wioh b .und.
2	It de U n u E n Ut Uy n h Uu Ut Uy f nd -oj brEt oEdn n/ n d.

GC Semi VOA

Qualifier	Qualifier Description
GC-	Gnjjo, U n jn/ ovnyj nx/ ndu / ot foi ies .wz z b .und.
2	It de U n u E n Ut Uy n h Uu Ut Uy f nd -oj brEt oEdn n/ n d.

HPLC/IC

Qualifier	Qualifier Description
2	It de U n u E n Ut Uy n h Uu Ut Uy f nd -oj brEt oEdn n/ n d.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
"	a e n d m t d n j E n p D p/ o i n S t E d n u e t U n E U E n j n u m i E n j n % o j n d o t U d j y h n e z E b U n u
Rg	r n j/ n t E g n/ o v n j y
I Fa	I o t E u F j n n a e n n e l
I F2	I o i o t y F o j S e , 2 t e
I NF	I o t E u N o F j n n a e n n e l
Dsg	D n % E U n s j j o j g U n (t o j S U e n d U b u o i n n d e n j n t / n)
DeFU	D e n t o t F U / E j
Da	D n n/ n o t a s e E (D o D K D O s)
Dawg Awg sWN	It de U n u U D e n t o t w g n - U t U y u a w g n - n x f U / n o t w o j U d d e n t U i t E U S n E j u U t o t U t U y u e o + E n u S % n
Dal	D n/ a n t a n v n i I o t / n t f U n o t (g U d o / z n S e f f y)
sDa	s u E n D n n/ n o t a s e E (D e x e)
aOD	a s e E o + D n n/ n o t (D o D K D O s)
aOQ	a s e E o + Q n U t E U n o t (D o D K D O s)
MI a	s r A j n/ o S S n t d n d p M U x e n S I o t E S e U t E a n v n i p
MDA	M e s n S D n n/ E b i n A/ E n f y (g U d o / z n S e f f y)
MDI	M e s n S D n n/ E b i n I o t / n t f U n o t (g U d o / z n S e f f y)
MDa	M n E o d D n n/ n o t a s e E
Ma	M e s n S a n v n i (D e x e)
Mr N	M o u E r j o b U b i n N n S b n j
MQa	M n E o d Q n U t E U n o t a s e E
NI	N o E U / m i U n d
ND	N o E D n n/ n d U E E n j n % o j n , i s e E (o j M D a o j s D a e - u z o h t)
Ns5	N n, U e n k A b u n t E
r OG	r o u d e n k r j n u n t E
r Qa	r j U / E U Q n U t E U n o t a s e E
r gsG	r j n u n S % n
QI	Q n U e f f I o t f o i
gsG	g n i U e n s j j o j g U n (g U d o / z n S e f f y)
ga	g n % o j n , a s e E o j g n q m u n d a s e E (g U d o / z n S e f f y)
gr D	g n i U e n r n j/ n t E D e n j n t / n w U S n U n j n o + E n j n i U e n d e n j n t / n b n n n t E n o % e E
TsF	T o x e f f y s q n o U n t E F U / E j (D e x e)
TsQ	T o x e f f y s q n o U n t E Q n o n t E (D e x e)
TNTI	T o o N n S n j o m u T o I o n t E

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4452-1
SDG: 03C1558196

Job ID: 890-4452-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4452-1****Receipt**

The samples were received on 3/30/2023 1:46 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 1.0°C

GC VOA

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-50426/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-50430/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-50430 and analytical batch 880-50521 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50514 and analytical batch 880-50707 were outside control limits for one or more analytes, see QC Sample Results for detail. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-50296 and analytical batch 880-50277 was outside the upper control limits.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-50297 and analytical batch 880-50279 was outside the upper control limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-50493 and analytical batch 880-50730 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. FS50 (890-4452-11), FS24 (890-4452-12), FS25 (890-4452-13), FS26 (890-4452-14) and FS27 (890-4452-15)

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

Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: SP 23

Lab Sample ID: 890-4432-1

Date Cr lleotex: 0d292d 10:03

HatAM Sr lix

Date Reoei/ ex: 0d2d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 10:00	C
Toimnt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 10:00	C
s Iyibnt znt n	<0.00C99	2 FC	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 10:00	C
S -Xyint n & p-Xyint n	<0.00698	2 FC	0.00698	S gIKg		04I0PK16 C:36	04I08k16 10:00	C
o-Xyint n	<0.00C99	2 FC	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 10:00	C
Xyint nu, ToEi	<0.00698	2 FC	0.00698	S gIKg		04I0PK16 C:36	04I08k16 10:00	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		27 - 017	743/ 3 1 0051	743/ 3 1 : 7507	0
0I-i fluorobenzene (Surr)	07:		27 - 017	743/ 3 1 0051	743/ 3 1 : 7507	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00k16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoie n RUt gn OjgUt u	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 06:06	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 06:06	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 06:06	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	079		27 - 017	743/43 1 7954	743/43 1 0151	0
o-Terphenyl	92		27 - 017	743/43 1 7954	743/43 1 0151	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	vdN		3.01	S gIKg			04I08k16 C1:30	C

Client Sample ID: ySd9

Lab Sample ID: 890-4432-2

Date Cr lleotex: 0d292d 10:10

HatAM Sr lix

Date Reoei/ ex: 0d2d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:36	04I08k16 10:60	C
Toimnt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:36	04I08k16 10:60	C
s Iyibnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:36	04I08k16 10:60	C
S -Xyint n & p-Xyint n	<0.00699	2	0.00699	S gIKg		04I0PK16 C:36	04I08k16 10:60	C
o-Xyint n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:36	04I08k16 10:60	C
Xyint nu, ToEi	<0.00699	2	0.00699	S gIKg		04I0PK16 C:36	04I08k16 10:60	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	077		27 - 017	743/ 3 1 0051	743/ 3 1 : 7517	0
0I-i fluorobenzene (Surr)	07:		27 - 017	743/ 3 1 0051	743/ 3 1 : 7517	0

snjofu l UjubUd

Client Sample Results

Client Sample ID: ySd9
 Date Cr Ileotex: 0d0902d 10:10
 Date Reoei/ ex: 0d0002d 1d:4v

Job ID: 890-4431-C
 GD5 : 061 C338C9P

Lab Sample ID: 890-4432-2

HatAM Sr lix

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00699	2	0.00699	S gKkg			04K0K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gKkg			04K03K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi0 n RUt gn OjgUt 0u	<30.0	2	30.0	S gKkg		04K04K16 09:64	04K04K16 06:13	C
(5 RO)-I P-I 00								
D0uni RUt gn OjgUt 0u (Ovnj	<30.0	2	30.0	S gKkg		04K04K16 09:64	04K04K16 06:13	C
I 00-I 18)								
Oli RUt gn OjgUt 0u (Ovnj I 18-I 6P)	<30.0	2	30.0	S gKkg		04K04K16 09:64	04K04K16 06:13	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
0-Chlorooctane	077		27 - 017			743743 1 79514	743743 1 015 6	0
o-Terphenyl	, 4		27 - 017			743743 1 79514	743743 1 015 6	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aæe	d8N		4.99	S gKkg			04K08K16 06:04	C

Client Sample ID: yS40

Lab Sample ID: 890-4432-d

Date Cr Ileotex: 0d0902d 10:20

HatAM Sr lix

Date Reoei/ ex: 0d0002d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.0010C	2	0.0010C	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
Toimt n	<0.0010C	2	0.0010C	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
s 0yibnt znt n	<0.0010C	2	0.0010C	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
S-Xyint n & p-Xyint n	<0.00401	2	0.00401	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
o-Xyint n	<0.0010C	2	0.0010C	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
Xyint nu, ToEi	<0.00401	2	0.00401	S gKkg		04K0PK16 00:36	04K08K16 10:3C	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	076		27 - 017			74373 1 0051	74373 1 750	0
00-i fluorobenzene (Surr)	077		27 - 017			74373 1 0051	74373 1 750	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00401	2	0.00401	S gKkg			04K00K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gKkg			04K03K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi0 n RUt gn OjgUt 0u	<49.9	2	49.9	S gKkg		04K04K16 09:64	04K04K16 06:47	C
(5 RO)-I P-I 00								
D0uni RUt gn OjgUt 0u (Ovnj	<49.9	2	49.9	S gKkg		04K04K16 09:64	04K04K16 06:47	C
I 00-I 18)								

snjof0 u l UjubUd

Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS40

Lab Sample ID: 890-4432-d

Date Cr lletotex: 0d292d 10:20

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C6:47	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	92		27 - 017			743743 1 795I4	743743 1 015I2	0	
o-Terphenyl	, 0		27 - 017			743743 1 795I4	743743 1 015I2	0	
Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	80M		4.9P	S gIKg			04I08k16 C6:09	C	

Client Sample ID: yS41

Lab Sample ID: 890-4432-4

Date Cr lletotex: 0d292d 10:23

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Bnt znt n	<0.00101	2	0.00101	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
Toimnt n	<0.00101	2	0.00101	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
s Eyibnt znt n	<0.00101	2	0.00101	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
S-Xyint n & p-Xyint n	<0.00404	2	0.00404	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
o-Xyint n	<0.00101	2	0.00101	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
Xyint nu, ToEI	<0.00404	2	0.00404	S gIKg		04I0Pk16 C0:36	04I08k16 1C:00	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	076		27 - 017			74373 3 1 005I1	74373 3 1 : 0500	0	
0I-i fluorobenzene (Surr)	072		27 - 017			74373 3 1 005I1	74373 3 1 : 0500	0	

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEI BTs X	<0.00404	2	0.00404	S gIKg			04I00k16 C0:4P	C	

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Tr tal Tz ,	vvI		49.9	S gIKg			04I03k16 09:16	C	

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
5 Uuoia n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C4:08	C	
(5 RO)-I P-I O									
Diesel RanVe BA/anios C/ eA	vvI		49.9	S gIKg		04I04k16 09:64	04I04k16 C4:08	C	
C10-C28(									
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C4:08	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	077		27 - 017			743743 1 795I4	743743 1 0457,	0	
o-Terphenyl	, 1		27 - 017			743743 1 795I4	743743 1 0457,	0	

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	77I		4.93	S gIKg			04I08k16 C6:14	C	

snjofu l UjubUd

Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS42

Lab Sample ID: 890-4432-3

Date Cr lleotex: 0d029d 10:d0

HatAM Sr lix

Date Reoei/ ex: 0d0d0d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C
Toimnt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C
s Hyibnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C
S -Xyint n & p-Xyint n	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C
o-Xyint n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C
Xyint nu, ToEi	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C:36	04I08k16 1C:6C	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	074		27 - 017	7437/ 3 1 0051	7437, 3 1 : 05I0	0
0I-i Fluorobenzene (Surr)	076		27 - 017	7437/ 3 1 0051	7437, 3 1 : 05I0	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.0069P	2	0.0069P	S gIKg			04I00k16 C0:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoie n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C4:60	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C4:60	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C4:60	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	9/		27 - 017	743743 1 795I4	743743 1 045I7	0
o-Terphenyl	, 7		27 - 017	743743 1 795I4	743743 1 045I7	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	109		4.97	S gIKg			04I08k16 C6:19	C

Client Sample ID: yS4d

Lab Sample ID: 890-4432-v

Date Cr lleotex: 0d029d 11:13

HatAM Sr lix

Date Reoei/ ex: 0d0d0d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C
Toimnt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C
s Hyibnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C
S -Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 C:36	04I08k16 1C:31	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	072		27 - 017	7437/ 3 1 0051	7437, 3 1 : 05:	0
0I-i Fluorobenzene (Surr)	072		27 - 017	7437/ 3 1 0051	7437, 3 1 : 05:	0

snjofu l UjubUd

Client Sample Results

Client Sample ID: yS4d
Date Cr Ileotex: 0d0902d 11:13
Date Reoei/ ex: 0d0002d 1d:4v

Job ID: 890-4431-C
GD5 : 06I C338C9P

Lab Sample ID: 890-4432-v
HatAM Sr lix

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00k16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi0 n RUt gn OjgUt 0u	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C3:04	C
(5 RO)-I P-I 00								
D0uni RUt gn OjgUt 0u (Ovnj	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C3:04	C
I 00-I 18)								
Oli RUt gn OjgUt 0u (Ovnj I 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 C3:04	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	07:		27 - 017	743743 1 795I4	743743 1 060D4	0
o-Terphenyl	, 0		27 - 017	743743 1 795I4	743743 1 060D4	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aæe	1090		3.0C	S gIKg			04I08k16 06:66	C

Client Sample ID: yS4v

Lab Sample ID: 890-4432-7
HatAM Sr lix

Date Cr Ileotex: 0d0902d 11:d0
Date Reoei/ ex: 0d0002d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C
Toimt n	<0.00C99	2	0.00C99	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C
s 0yibnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C
S-Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0Pk16 00:36	04I08k16 11:C1	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	07:		27 - 017	74373 1 00001	74373 1 10000	0
00-i Fluorobenzene (Surr)	072		27 - 017	74373 1 00001	74373 1 10000	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00k16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi0 n RUt gn OjgUt 0u	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 C3:40	C
(5 RO)-I P-I 00								
D0uni RUt gn OjgUt 0u (Ovnj	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 C3:40	C
I 00-I 18)								

snjof0 u l UjubUd

Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS4v

Lab Sample ID: 890-4432-7

Date Cr lletotex: 0d292d 11:d0

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 C3:40	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
0-Chlorooctane	92		27 - 017			743743 1 79514	743743 1 06517	0
o-Terphenyl	29		27 - 017			743743 1 79514	743743 1 06517	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	884		3.01	S gIKg			04I08k16 C6:68	C

Client Sample ID: yS47

Lab Sample ID: 890-4432-8

Date Cr lletotex: 0d292d 11:d3

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00100	2	0.00100	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
Toimnt n	<0.00100	2	0.00100	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
s Eyibnt znt n	<0.00100	2	0.00100	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
S-Xyint n & p-Xyint n	<0.00699	2	0.00699	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
o-Xyint n	<0.00100	2	0.00100	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
Xyint nu, ToEi	<0.00699	2	0.00699	S gIKg		04I0Pk16 C0:36	04I08k16 11:66	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	070		27 - 017			743731 1 0051	743731 1 51	0
0I-i fluorobenzene (Surr)	074		27 - 017			743731 1 0051	743731 1 51	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00699	2	0.00699	S gIKg			04I00k16 C0:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Tr tal Tz,	v4M		30.0	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoiu n RUt gn OjgUt u	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 CP:01	C
(5 RO)-I P-I O								
Diesel RanVe BA/anios C/ eA	v4M		30.0	S gIKg		04I04k16 09:64	04I04k16 CP:01	C
C10-C28(								
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<30.0	2	30.0	S gIKg		04I04k16 09:64	04I04k16 CP:01	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
0-Chlorooctane	91		27 - 017			743743 1 79514	743743 1 0/ 5:	0
o-Terphenyl	26		27 - 017			743743 1 79514	743743 1 0/ 5:	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	3d9		3.06	S gIKg			04I08k16 C6:46	C

snjofu l UjubUd

Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS48

Lab Sample ID: 890-4432-9

Date Cr lleotex: 0d292d 11:40

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C
Toimnt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C
s thybnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C
S -Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I08k16 11:36	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	070		27 - 017	7437/ 3 1 0051	7437, 3 1 : 51	0
0I-i fluorobenzene (Surr)	07,		27 - 017	7437/ 3 1 0051	7437, 3 1 : 51	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00k16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Tr tal Tz ,	499		49.9	S gIKg			04I03k16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi2 n RUt gn OjgUt 2 u	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 CP:16	C
(5 RO)-I P-I 0								
Diesel RanVe BA/anios 2/ eA	499		49.9	S gIKg		04I04k16 09:64	04I04k16 CP:16	C
C10-C28(								
Oli RUt gn OjgUt 2 u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:64	04I04k16 CP:16	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	004		27 - 017	743743 1 7954	743743 1 0/ 5 1	0
o-Terphenyl	91		27 - 017	743743 1 7954	743743 1 0/ 5 1	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	v77		3.04	S gIKg			04I08k16 C6:48	C

Client Sample ID: yS49

Lab Sample ID: 890-4432-10

Date Cr lleotex: 0d292d 11:43

HatAM Sr lix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C
Toimnt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C
s thybnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C
S -Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I08k16 16:C4	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	076		27 - 017	7437/ 3 1 0051	7437, 3 1 : 154	0
0I-i fluorobenzene (Surr)	079		27 - 017	7437/ 3 1 0051	7437, 3 1 : 154	0

snjof2 u l UjubUd

Client Sample Results

Client Sample ID: yS49
 Date Received: 09/06/2023 11:43
 Date Received: 09/06/2023 11:43

Job ID: 890-4431-C
 GD5: 061 C338C9P

Client Sample ID: yS49

Lab Sample ID: 890-4432-10

Date Received: 09/06/2023 11:43

HatAM Sr lix

Date Received: 09/06/2023 11:43

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTsX	<0.00698	2	0.00698	SgKkg	-		04K0K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Tr tal Tz,	134		49.9	SgKkg	-		04K0K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi n Ru gn OjgUt u	<49.9	2	49.9	SgKkg	-	04K0K16 09:64	04K0K16 CP:43	C
(5 RO)-I P-I O								
Diesel RanVe BA/anios eA	134		49.9	SgKkg	-	04K0K16 09:64	04K0K16 CP:43	C
C10-C28(								
Oli Ru gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	SgKkg	-	04K0K16 09:64	04K0K16 CP:43	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
o-Chlorooctane	96		27 - 017	743743 1 7954	743743 1 0/ 546	0
o-Terphenyl	2/		27 - 017	743743 1 7954	743743 1 0/ 546	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aex	d04		4.97	SgKkg	-		04K0K16 06:36	C

Client Sample ID: yS30

Lab Sample ID: 890-4432-11

Date Received: 09/06/2023 11:30

HatAM Sr lix

Date Received: 09/06/2023 11:30

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00100	2	0.00100	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C
Toimt n	<0.00100	2	0.00100	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C
s yibnt znt n	<0.00100	2	0.00100	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C
S-Xyint n & p-Xyint n	<0.0040C	2	0.0040C	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C
o-Xyint n	<0.00100	2	0.00100	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C
Xyint nu, ToEi	<0.0040C	2	0.0040C	SgKkg	-	04K0K16 00:36	04K0K16 00:04	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		27 - 017	743743 1 0051	743743 1 7054	0
04-i fluorobenzene (Surr)	074		27 - 017	743743 1 0051	743743 1 7054	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTsX	<0.0040C	2	0.0040C	SgKkg	-		04K0K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Tr tal Tz,	413		30.0	SgKkg	-		04K0K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi n Ru gn OjgUt u	<30.0	2	30.0	SgKkg	-	04K0K16 09:64	04K0K16 C7:07	C
(5 RO)-I P-I O								
Diesel RanVe BA/anios eA	413		30.0	SgKkg	-	04K0K16 09:64	04K0K16 C7:07	C
C10-C28(								

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS30 Lab Sample ID: 890-4432-11
Date Cr lletotex: 0d292d 11:30 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<30.0	2	30.0	S gIKg	-	04I04k16 09:64	04I04k16 C7:07	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	9,		27 - 017			743743 1 7954	743743 1 0252	0	
o-Terphenyl	26		27 - 017			743743 1 7954	743743 1 0252	0	
Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	d31		3.06	S gIKg	-		04I08k16 C3:C3	C	

Client Sample ID: yS24 Lab Sample ID: 890-4432-12
Date Cr lletotex: 0d292d 12:10 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Bnt znt n	<0.00101	2	0.00101	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
Toimnt n	<0.00101	2	0.00101	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
s Eyibnt znt n	<0.00101	2	0.00101	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
S-Xyint n & p-Xyint n	<0.00406	2	0.00406	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
o-Xyint n	<0.00101	2	0.00101	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
Xyint nu, ToEi	<0.00406	2	0.00406	S gIKg	-	04I0Pk16 C0:36	04I09k16 0C:14	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	077		27 - 017			74373 3 1 0051	743793 1 705 4	0	
0I-i fluorobenzene (Surr)	077		27 - 017			74373 3 1 0051	743793 1 705 4	0	

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi BTs X	<0.00406	2	0.00406	S gIKg	-		04I00k16 C0:4P	C	

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi Tr H	<49.9	2	49.9	S gIKg	-		04I03k16 09:16	C	

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
5 Uoiu n RUt gn OjgUt u	<49.9	2	49.9	S gIKg	-	04I04k16 09:64	04I04k16 C7:19	C	
(5 RO)-I P-I O									
Douini RUt gn OjgUt u (Ovnj l O-I 18)	<49.9	2	49.9	S gIKg	-	04I04k16 09:64	04I04k16 C7:19	C	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg	-	04I04k16 09:64	04I04k16 C7:19	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	076		27 - 017			743743 1 7954	743743 1 025 9	0	
o-Terphenyl	, 4		27 - 017			743743 1 7954	743743 1 025 9	0	

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	1v40		14.8	S gIKg	-		04I08k16 C3:10	3	

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Client Sample Results

Client Sample ID: yS23
 Date of Collection: 09/06/2023 12:03
 Date Received: 09/06/2023 14:40

Job ID: 890-4431-C
 GD5: 061 C338C9P

Client Sample ID: yS23

Lab Sample ID: 890-4432-1d

Date of Collection: 09/06/2023 12:03

HatAM Sr lix

Date Received: 09/06/2023 14:40

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C
Toimnt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C
s Iyibnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C
S-Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 C:36	04I09K16 0C:44	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	074		27 - 017	743/ 3 1 0051	743/93 1 70544	0
0I-i fluorobenzene (Surr)	07/		27 - 017	743/ 3 1 0051	743/93 1 70544	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoié n RUt gn OjgUt é u	<49.9	2	49.9	S gIKg		04I04K16 09:64	04I04K16 C7:30	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt é u (Ovnj	<49.9	2	49.9	S gIKg		04I04K16 09:64	04I04K16 C7:30	C
I O-I 18)								
Oli RUt gn OjgUt é u (Ovnj I 18-I 6P)	<49.9	2	49.9	S gIKg		04I04K16 09:64	04I04K16 C7:30	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	07:		27 - 017	743/43 1 7954	743/43 1 0257	0
o-Terphenyl	, :		27 - 017	743/43 1 7954	743/43 1 0257	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	1dd0		3.00	S gIKg			04I08K16 C3:13	C

Client Sample ID: yS2v

Lab Sample ID: 890-4432-14

Date of Collection: 09/06/2023 14:13

HatAM Sr lix

Date Received: 09/06/2023 14:40

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I09K16 01:03	C
Toimnt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I09K16 01:03	C
s Iyibnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I09K16 01:03	C
S-Xyint n & p-Xyint n	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C:36	04I09K16 01:03	C
o-Xyint n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C:36	04I09K16 01:03	C
Xyint nu, ToEi	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C:36	04I09K16 01:03	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	070		27 - 017	743/ 3 1 0051	743/93 1 7: 56	0
0I-i fluorobenzene (Surr)	99		27 - 017	743/ 3 1 0051	743/93 1 7: 56	0

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Client Sample Results

Client Sample ID: yS2v
 Date of Collection: 09/06/2023 14:10H

Job ID: 890-4431-C
 GD5: 061 C338C9P

Client Sample ID: yS2v

Lab Sample ID: 890-4432-14

Date of Collection: 09/06/2023 14:13

HatAM Sr lix

Date of Receipt: 09/06/2023 14:4v

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.0069P	2	0.0069P	SgKkg			04K0K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	SgKkg			04K03K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoiid n RUt gn OjgUt u	<30.0	2	30.0	SgKkg		04K04K16 09:64	04K04K16 C8:C1	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<30.0	2	30.0	SgKkg		04K04K16 09:64	04K04K16 C8:C1	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<30.0	2	30.0	SgKkg		04K04K16 09:64	04K04K16 C8:C1	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Chlorooctane	007		27 - 017			743743 1 79514	743743 1 0, 5:	0
o-Terphenyl	9/		27 - 017			743743 1 79514	743743 1 0, 5:	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aex	720		4.99	SgKkg			04K08K16 C3:60	C

Client Sample ID: yS27

Lab Sample ID: 890-4432-13

Date of Collection: 09/06/2023 14:20

HatAM Sr lix

Date of Receipt: 09/06/2023 14:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.0010C	2	0.0010C	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C
Toimt n	<0.0010C	2	0.0010C	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C
s yibnt znt n	<0.0010C	2	0.0010C	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C
S-Xyint n & p-Xyint n	<0.00401	2	0.00401	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C
o-Xyint n	<0.0010C	2	0.0010C	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C
Xyint nu, ToEi	<0.00401	2	0.00401	SgKkg		04K0PK16 C0:36	04K09K16 01:13	C

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	07/		27 - 017			743731 1 0051	743793 1 7: 5 6	0
0,4-di fluorobenzene (Surr)	07:		27 - 017			743731 1 0051	743793 1 7: 5 6	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00401	2	0.00401	SgKkg			04K0K16 00:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	SgKkg			04K03K16 09:16	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoiid n RUt gn OjgUt u	<49.9	2	49.9	SgKkg		04K04K16 09:64	04K04K16 C8:64	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<49.9	2	49.9	SgKkg		04K04K16 09:64	04K04K16 C8:64	C
I O-I 18)								

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS27 Lab Sample ID: 890-4432-13
Date Cr lletotex: 0d292d 1d:20 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04K16 09:64	04I04K16 C3:64	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	077		27 - 017			743743 1 7954	743743 1 0, 54	0	
o-Terphenyl	, 0		27 - 017			743743 1 7954	743743 1 0, 54	0	
Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	979		4.98	S gIKg			04I08K16 C3:64	C	

Client Sample ID: ySd1 Lab Sample ID: 890-4432-1v
Date Cr lletotex: 0d292d 1d:23 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Bnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
Toirmt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
s Eyibnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
S-Xyint n & p-Xyint n	<0.0040C	2	0.0040C	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
o-Xyint n	<0.00100	2	0.00100	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
Xyint nu, ToEi	<0.0040C	2	0.0040C	S gIKg		04I0PK16 C0:36	04I09K16 01:4P	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	071		27 - 017			74373 3 1 0051	743793 1 7: 54	0	
0D-i fluorobenzene (Surr)	071		27 - 017			74373 3 1 0051	743793 1 7: 54	0	

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi BTs X	<0.0040C	2	0.0040C	S gIKg			04I00K16 C0:4P	C	

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03K16 C1:10	C	

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
5 Uuoia n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C0:60	C	
(5 RO)-I P-I C0									
Douini RUt gn OjgUt u (Ovnj l C0-I 18)	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C0:60	C	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C0:60	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	9:		27 - 017			743743 1 7959	743743 1 0757	0	
o-Terphenyl	071		27 - 017			743743 1 7959	743743 1 0757	0	

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	1d00		13.C	S gIKg			04I00K16 C1:04	3	

snjofu l UjubUd

Client Sample Results

Client Sample ID: ySd2
Date Cr Ileotex: 0d02d 1d:00
Date Reoei/ ex: 0d00d 1d:4v

Job ID: 890-4431-C
GD5 : 061 C338C9P

Lab Sample ID: 890-4432-17

HatAM Sr lix

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00101	2	0.00101	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C
Toimnt n	<0.00101	2	0.00101	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C
s Hyibnt znt n	<0.00101	2	0.00101	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C
S -Xyint n & p-Xyint n	<0.00404	2	0.00404	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C
o-Xyint n	<0.00101	2	0.00101	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C
Xyint nu, ToEi	<0.00404	2	0.00404	S gKkg		04I0Pk16 C:36	04I09k16 06:0P	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	070		27 - 017	743/ 3 1 0051	743/93 1 715/	0
0I-i Fluorobenzene (Surr)	076		27 - 017	743/ 3 1 0051	743/93 1 715/	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00404	2	0.00404	S gKkg			04I00k16 C:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gKkg			04I03k16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoie n RUt gn OjgUt u	<49.9	2	49.9	S gKkg		04I04k16 09:69	04I04k16 C:63	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<49.9	2	49.9	S gKkg		04I04k16 09:69	04I04k16 C:63	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<49.9	2	49.9	S gKkg		04I04k16 09:69	04I04k16 C:63	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	, /		27 - 017	743/43 1 795/9	743/43 1 005/6	0
o-Terphenyl	070		27 - 017	743/43 1 795/9	743/43 1 005/6	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	1080		4.99	S gKkg			04I00k16 C1:C8	C

Client Sample ID: ySdd

Lab Sample ID: 890-4432-18

Date Cr Ileotex: 0d02d 1d:30

HatAM Sr lix

Date Reoei/ ex: 0d00d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C
Toimnt n	<0.00C99	2	0.00C99	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C
s Hyibnt znt n	<0.00C99	2	0.00C99	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C
S -Xyint n & p-Xyint n	<0.00698	2	0.00698	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C
o-Xyint n	<0.00C99	2	0.00C99	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gKkg		04I0Pk16 C:36	04I09k16 06:1P	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	071		27 - 017	743/ 3 1 0051	743/93 1 715 /	0
0I-i Fluorobenzene (Surr)	07/		27 - 017	743/ 3 1 0051	743/93 1 715 /	0

snjofu l UjubUd

Client Sample Results

Client Est uoinS
r jon/ EGD: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: ySdd

Lab Sample ID: 890-4432-18

Date Cr lletotex: 0d0902d 1d:30

HatAM Sr lix

Date Reoei/ ex: 0d0002d 1d:4v

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04K0K16 C0:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gIKg			04K03K16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uuoie n RUt gn OjgUt e u	<30.0	2	30.0	S gIKg		04K04K16 09:69	04K04K16 C0:37	C
(5 RO)-I P-I 00								
Douni RUt gn OjgUt e u (Ovnj	<30.0	2	30.0	S gIKg		04K04K16 09:69	04K04K16 C0:37	C
I 00-I 18)								
Oli RUt gn OjgUt e u (Ovnj I 18-I 6P)	<30.0	2	30.0	S gIKg		04K04K16 09:69	04K04K16 C0:37	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
0-Chlorooctane	, ,		27 - 017			743743 1 79519	743743 1 0052	0
o-Terphenyl	070		27 - 017			743743 1 79519	743743 1 0052	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aex	880		4.97	S gIKg			04K08K16 C3:39	C

Client Sample ID: ySd4

Lab Sample ID: 890-4432-19

Date Cr lletotex: 0d0902d 1d:33

HatAM Sr lix

Date Reoei/ ex: 0d0002d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00101	2	0.00101	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
Toimt n	<0.00101	2	0.00101	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
s Eyibnt znt n	<0.00101	2	0.00101	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
S-Xyint n & p-Xyint n	<0.00406	2	0.00406	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
o-Xyint n	<0.00101	2	0.00101	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
Xyint nu, ToEi	<0.00406	2	0.00406	S gIKg		04K0PK16 C0:36	04K09K16 06:47	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	070		27 - 017			743731 1 0051	743793 1 71512	0
00-i Fluorobenzene (Surr)	071		27 - 017			743731 1 0051	743793 1 71512	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00406	2	0.00406	S gIKg			04K00K16 C0:4P	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gIKg			04K03K16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios 00RB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uuoie n RUt gn OjgUt e u	<30.0	2	30.0	S gIKg		04K04K16 09:69	04K04K16 C1:09	C
(5 RO)-I P-I 00								
Douni RUt gn OjgUt e u (Ovnj	<30.0	2	30.0	S gIKg		04K04K16 09:69	04K04K16 C1:09	C
I 00-I 18)								

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: ySd4

Lab Sample ID: 890-4432-19

Date Cr lletotex: 0d292d 1d:33

HatAM Sr llix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<30.0	2	30.0	S gIKg		04I04K16 09:69	04I04K16 C1:C9	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	079		27 - 017			743743 1 7959	743743 1 0: 59	0	
o-Terphenyl	0: 2		27 - 017			743743 1 7959	743743 1 0: 59	0	
Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	2800		14.8	S gIKg			04I08K16 CP:C6	3	

Client Sample ID: ySd3

Lab Sample ID: 890-4432-20

Date Cr lletotex: 0d292d 14:00

HatAM Sr llix

Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
Toirmt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
s Eyibnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
S-Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 CC:36	04I09K16 04:07	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	070		27 - 017			74373 3 1 0051	743793 1 7452	0	
0Di-i fluorobenzene (Surr)	07/		27 - 017			74373 3 1 0051	743793 1 7452	0	

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00K16 C0:4P	C	

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03K16 C1:10	C	

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
5 Uoiu n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C1:4C	C	
(5 RO)-I P-I O									
Douini RUt gn OjgUt u (Ovnj l O-I 18)	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C1:4C	C	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04K16 09:69	04I04K16 C1:4C	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	, 9		27 - 017			743743 1 7959	743743 1 0: 5I0	0	
o-Terphenyl	071		27 - 017			743743 1 7959	743743 1 0: 5I0	0	

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	10v0		4.93	S gIKg			04I08K16 CP:C8	C	

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS28

Lab Sample ID: 890-4432-21

Date Cr lleotex: 0d029d 13:00

HatAM Sr lix

Date Reoei/ ex: 0d0d0d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C
Toimt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C
s Hyibnt znt n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C
S -Xyint n & p-Xyint n	<0.00698	2	0.00698	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C
o-Xyint n	<0.00C99	2	0.00C99	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C
Xyint nu, ToEi	<0.00698	2	0.00698	S gIKg		04I0PK16 C:30	04I08k16 C0:17	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	071		27 - 017	743/ 3 1 0057	743/ 3 1 075 2	0
0I-i Fluorobenzene (Surr)	074		27 - 017	743/ 3 1 0057	743/ 3 1 075 2	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00698	2	0.00698	S gIKg			04I00k16 C0:19	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03k16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoie n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C6:06	C
(5 RO)-I P-I O								
Douni RUt gn OjgUt u (Ovnj	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C6:06	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C6:06	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	97		27 - 017	743/43 1 7959	743/43 1 0151	0
o-Terphenyl	07/		27 - 017	743/43 1 7959	743/43 1 0151	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	1d10		3.0C	S gIKg			04I08k16 CP:16	C

Client Sample ID: yS29

Lab Sample ID: 890-4432-22

Date Cr lleotex: 0d029d 13:03

HatAM Sr lix

Date Reoei/ ex: 0d0d0d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C
Toimt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C
s Hyibnt znt n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C
S -Xyint n & p-Xyint n	<0.00699	2	0.00699	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C
o-Xyint n	<0.00100	2	0.00100	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C
Xyint nu, ToEi	<0.00699	2	0.00699	S gIKg		04I0PK16 C:30	04I08k16 C0:48	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	07,		27 - 017	743/ 3 1 0057	743/ 3 1 075,	0
0I-i Fluorobenzene (Surr)	07/		27 - 017	743/ 3 1 0057	743/ 3 1 075,	0

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Client Sample Results

Client Sample ID: yS29
 Date of Collection: 09/05/2023 13:03
 Date Received: 09/05/2023 14:40

Job ID: 890-4431-C
 GD5: 061 C338C9P

Client Sample ID: yS29

Lab Sample ID: 890-4432-22

Date of Collection: 09/05/2023 13:03

HatAM Sr lix

Date Received: 09/05/2023 14:40

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTsX	<0.00699	2	0.00699	SgKkg	-		04K0K16 C0:19	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	SgKkg	-		04K03K16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi n Ru gn OjgUt u	<30.0	2	30.0	SgKkg	-	04K04K16 09:69	04K04K16 C6:13	C
(5 RO)-I P-I O								
Duni Ru gn OjgUt u (Ovnj	<30.0	2	30.0	SgKkg	-	04K04K16 09:69	04K04K16 C6:13	C
I O-I 18)								
Oli Ru gn OjgUt u (Ovnj I 18-I 6P)	<30.0	2	30.0	SgKkg	-	04K04K16 09:69	04K04K16 C6:13	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
o-Chlorooctane	97		27 - 017			743743 1 7959	743743 1 015 6	0
o-Terphenyl	076		27 - 017			743743 1 7959	743743 1 015 6	0

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Aex	1270		3.01	SgKkg	-		04K08K16 C0:18	C

Client Sample ID: ySd0

Lab Sample ID: 890-4432-2d

Date of Collection: 09/05/2023 13:10

HatAM Sr lix

Date Received: 09/05/2023 14:40

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.00100	2	0.00100	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
Toimt n	<0.00100	2	0.00100	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
s yibnt znt n	<0.00100	2	0.00100	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
S-Xyint n & p-Xyint n	<0.0040C	2	0.0040C	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
o-Xyint n	<0.00100	2	0.00100	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
Xyint nu, ToEi	<0.0040C	2	0.0040C	SgKkg	-	04K0PK16 C0:30	04K08K16 C0:08	C
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		27 - 017			743731 1 0057	743731 1 0057	0
0,4-di fluorobenzene (Surr)	071		27 - 017			743731 1 0057	743731 1 0057	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTsX	<0.0040C	2	0.0040C	SgKkg	-		04K0K16 C0:19	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Tr tal Tz,	30M		49.9	SgKkg	-		04K03K16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi n Ru gn OjgUt u	<49.9	2	49.9	SgKkg	-	04K04K16 09:69	04K04K16 C6:47	C
(5 RO)-I P-I O								
Diesel RanVe BA/anios DB/ eA	30M		49.9	SgKkg	-	04K04K16 09:69	04K04K16 C6:47	C
C10-C28(								

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: ySd0 Lab Sample ID: 890-4432-2d
Date Cr lletotex: 0d292d 13:10 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(Cr ntinuex(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C6:47	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	9:		27 - 017			743743 1 7959	743743 1 01542	0	
o-Terphenyl	079		27 - 017			743743 1 7959	743743 1 01542	0	
Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	1490		3.03	S gIKg			04I08k16 CP:61	C	

Client Sample ID: yS44 Lab Sample ID: 890-4432-24
Date Cr lletotex: 0d292d 13:13 HatAM Sr lix
Date Reoei/ ex: 0d202d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Bnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
Toimnt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
s Eyibnt znt n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
S-Xyint n & p-Xyint n	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
o-Xyint n	<0.00C98	2	0.00C98	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
Xyint nu, ToEi	<0.0069P	2	0.0069P	S gIKg		04I0PK16 C0:30	04I08k16 C0:19	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	070		27 - 017			74373 1 0057	74373 1 005 9	0	
0I-i fluorobenzene (Surr)	076		27 - 017			74373 1 0057	74373 1 005 9	0	

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi BTs X	<0.0069P	2	0.0069P	S gIKg			04I00k16 C0:19	C	

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
ToEi Tr H	<49.9	2	49.9	S gIKg			04I03k16 C1:10	C	

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
5 Uuoia n RUt gn OjgUt u	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C4:08	C	
(5 RO)-I P-I O									
Douini RUt gn OjgUt u (Ovnj l O-I 18)	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C4:08	C	
Oli RUt gn OjgUt u (Ovnj l 18-I 6P)	<49.9	2	49.9	S gIKg		04I04k16 09:69	04I04k16 C4:08	C	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
0-Chlorooctane	91		27 - 017			743743 1 7959	743743 1 0457	0	
o-Terphenyl	072		27 - 017			743743 1 7959	743743 1 0457	0	

Hethr x: EzG d00M - Gnir ns. Ir n ChA matr VAaph) - Sr luble									
Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao	
Chlr Axe	8v1		4.99	S gIKg			04I08k16 CP:67	C	

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Client Sample Results

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Client Sample ID: yS43

Lab Sample ID: 890-4432-23

Date Cr lletotex: 0d029d 13:20

HatAM Sr lix

Date Reoei/ ex: 0d0d0d 1d:4v

Hethr x: SP 84v 8021W- 6r latile BA/anio Cr mpr unxs Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Bnt znt n	<0.0010C	2	0.0010C	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C
Toimt n	<0.0010C	2	0.0010C	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C
s Hyibnt znt n	<0.0010C	2	0.0010C	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C
S-Xyint n & p-Xyint n	<0.00401	2	0.00401	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C
o-Xyint n	<0.0010C	2	0.0010C	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C
Xyint nu, ToEi	<0.00401	2	0.00401	S gKkg		04I0Pk16 CP:48	04I07k16 CP:46	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	002		27 - 017	7437/ 3 1 0/ 5I,	743723 1 0/ 5I1	0
0I-i Fluorobenzene (Surr)	, :		27 - 017	7437/ 3 1 0/ 5I,	743723 1 0/ 5I1	0

Hethr x: TGL SBz Tr tal WTEX - Tr tal WTEX Caloulatir n

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi BTs X	<0.00401	2	0.00401	S gKkg			04I08k16 09:CC	C

Hethr x: SP 84v 8013 5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
ToEi Tr H	<30.0	2	30.0	S gKkg			04I03k16 C1:10	C

Hethr x: SP 84v 8013W5H - Diesel RanVe BA/anios DRB(Q C(

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
5 Uoi0 n RUt gn OjgUt u	<30.0	2	30.0	S gKkg		04I04k16 09:69	04I04k16 C4:60	C
(5 RO)-I P-I O								
D0uni RUt gn OjgUt u (Ovnj	<30.0	2	30.0	S gKkg		04I04k16 09:69	04I04k16 C4:60	C
I O-I 18)								
Oli RUt gn OjgUt u (Ovnj I 18-I 6P)	<30.0	2	30.0	S gKkg		04I04k16 09:69	04I04k16 C4:60	C

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	07:		27 - 017	743743 1 795I9	743743 1 045I7	0
o-Terphenyl	0: 7		27 - 017	743743 1 795I9	743743 1 045I7	0

Hethr x: EzG d00N - Gnir ns. Ir n ChA matr VAaph) - Sr luble

Gnal) te	Result	QualifieA	RL	Unit	D	z AepaAex	Gnal) Fex	Dil yao
Chlr Axe	8d3		4.98	S gKkg			04I08k16 CP:41	C

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Surrogate Summary

Int Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-1P494-A-C-D MG	MUEx GpLn	CC1	9C
880-1P494-A-Cs MGD	MUEx GpLn Dmpie UEn	9C	F8
890-4449-A-C-D MG	MUEx GpLn	CC4	CCP
890-4449-A-Cs MGD	MUEx GpLn Dmpie UEn	CC0	CC
890-4431-C	G7 13	9F	CC1
890-4431-CMG	G7 13	CC3	CC1
890-4431-CMGD	G7 13	CC6	CC9
890-4431-1	WG69	CC0	CC1
890-4431-6	WG40	CC3	CCP
890-4431-4	WG4C	CC3	CCF
890-4431-3	WG41	CC4	CC3
890-4431-P	WG46	CCF	CCF
890-4431-F	WG4P	CC1	CCF
890-4431-8	WG4F	CC	CC4
890-4431-9	WG48	CC	CC8
890-4431-CC	WG49	CC3	CC9
890-4431-CC	WG30	9F	CC4
890-4431-C1	WG14	CCP	CC0
890-4431-CC	WG13	CC4	CCP
890-4431-C4	WG1P	CC	99
890-4431-C3	WG1F	CCP	CC1
890-4431-CP	WG6C	CC6	CCP
890-4431-CF	WG61	CC	CC3
890-4431-C8	WG66	CC6	CCP
890-4431-C9	WG64	CC	CCP
890-4431-10	WG63	CC	CCP
890-4431-1C	WG18	CC6	CC4
890-4431-11	WG19	CC8	CCP
890-4431-16	WG60	99	CC6
890-4431-14	WG44	CC	CC3
890-4431-13	WG43	CCF	81
al G 880-30460K-A	aUb l ot fpoi GUS pin	CCF	CCP
al G 880-303C6K-A	aUb l ot fpoi GUS pin	CC3	CC
al G 880-303C4K-A	aUb l ot fpoi GUS pin	CC1	CCF
al GD 880-30460Kl-A	aUb l ot fpoi GUS pin Dmp	CC0	FF
al GD 880-303C6Kl-A	aUb l ot fpoi GUS pin Dmp	CC	CC9
al GD 880-303C4Kl-A	aUb l ot fpoi GUS pin Dmp	CC4	CC4
MB 880-3041P8-A	MnEod BiUt L	PF GC-	84
MB 880-30460K3-A	MnEod BiUt L	P8 GC-	84
MB 880-303C6K3-A	MnEod BiUt L	91	9F
MB 880-303C4K3-A	MnEod BiUt L	91	98
MB 880-30P1Q8	MnEod BiUt L	9C	CC0

Surrogate Legend

BWB = 4-BjoSofimjobnt znt n (Grjj)

DWBZ = C,4-Dfimojobnt znt n (Grjj)

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Surrogate Summary

Client EstuoinS

Job ID: 890-4431-C

r joon/ EGE: r oLnj aULn 2t eE410H

GD5 : 06I C338C9P

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-1PF68-A-Cs MG	MUEx GpLn	CC	F3
880-1PF68-A-C-WMGD	MUEx GpLn Dmpie UL	CC1	F3
890-4431-C	G7 13	CO9	9F
890-4431-1	WG69	CO0	84
890-4431-6	WG40	9F	8C
890-4431-4	WG4C	CO0	86
890-4431-3	WG41	9P	80
890-4431-P	WG46	CO1	8C
890-4431-F	WG4P	9F	F9
890-4431-8	WG4F	96	F3
890-4431-9	WG48	CO4	96
890-4431-CO	WG49	93	FP
890-4431-CC	WG30	98	F3
890-4431-C1	WG14	CO3	84
890-4431-C6	WG13	CO1	81
890-4431-C4	WG1P	CO0	9P
890-4431-C3	WG1F	CO0	8C
890-4431-CP	WG6C	91	COF
890-4431-CP MG	WG6C	CO1	COF
890-4431-CP MGD	WG6C	CO0	CO6
890-4431-CF	WG61	8P	COF
890-4431-C8	WG66	88	COF
890-4431-C9	WG64	CO9	C1F
890-4431-10	WG63	89	CO6
890-4431-1C	WG18	90	COF
890-4431-11	WG19	90	CO3
890-4431-16	WG60	91	CO9
890-4431-14	WG44	96	COF
890-4431-13	WG43	CO1	C10
al G 880-3019PK1-A	aUb l ot ffoi GUS pin	C1P	9P
al G 880-3019FK1-A	aUb l ot ffoi GUS pin	CO0	C13
al GD 880-3019PK6-A	aUb l ot ffoi GUS pin Dmp	CO4	80
al GD 880-3019FK6-A	aUb l ot ffoi GUS pin Dmp	CC3	C19
MB 880-3019PK-A	Mnfhod BiUt L	C46 GC+	CO8
MB 880-3019FK-A	Mnfhod BiUt L	C4C GC+	CP6 GC+

Surrogate Legend

C O = C-I hiojoo/ EULn

OTr H = o-Tnjphnt yi

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-50426/5-A

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50426

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bnt znt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C
Toimnt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C
s Eyibnt znt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C
S-Xyint n & p-Xyint n	<0.00400	2	0.00400	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C
o-Xyint n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C
Xyint nu, ToEj	<0.00400	2	0.00400	S gKkg		04I03k16 CP:CP	04I0Pk16 C3:30	C

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	10	S7-	03 - 7/ 3	3428: 29/ 71,71	3428129/ 7: : 3	7
7i4-Chfluorobenzene (Surr)	D4		03 - 7/ 3	3428: 29/ 71,71	3428129/ 7: : 3	7

Lab Sample ID: MB 880-50430/5-A

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50430

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bnt znt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:48	04I07k16 03:63	C
Toimnt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:48	04I07k16 03:63	C
s Eyibnt znt n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:48	04I07k16 03:63	C
S-Xyint n & p-Xyint n	<0.00400	2	0.00400	S gKkg		04I03k16 CP:48	04I07k16 03:63	C
o-Xyint n	<0.00100	2	0.00100	S gKkg		04I03k16 CP:48	04I07k16 03:63	C
Xyint nu, ToEj	<0.00400	2	0.00400	S gKkg		04I03k16 CP:48	04I07k16 03:63	C

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1D	S7-	03 - 7/ 3	3428: 29/ 71,4D	3428029/ 3: : /:	7
7i4-Chfluorobenzene (Surr)	D4		03 - 7/ 3	3428: 29/ 71,4D	3428029/ 3: : /:	7

Lab Sample ID: LCS 880-50430/1-A

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50430

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bnt znt n	0.000	0.099PC		S gKkg		000	70 - 060
Toimnt n	0.000	0.0040		S gKkg		004	70 - 060
s Eyibnt znt n	0.000	0.09P90		S gKkg		97	70 - 060
S-Xyint n & p-Xyint n	0.100	0.0879		S gKkg		94	70 - 060
o-Xyint n	0.000	0.099P6		S gKkg		000	70 - 060

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	730		03 - 7/ 3
7i4-Chfluorobenzene (Surr)	731		03 - 7/ 3

Lab Sample ID: LCSD 880-50430/2-A

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bnt znt n	0.000	0.0077		S gKkg		008	70 - 060	8	63

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

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

Lab Sample ID: LCSD 880-50430/2-A

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50430

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toimnt n	0.000	0.006P		S glKkg		004	70 - 060	9	63
s Eyibnt znt n	0.000	0.0077		S glKkg		008	70 - 060	00	63
S-Xyint n & p-Xyint n	0.100	0.1094		S glKkg		003	70 - 060	00	63
o-Xyint n	0.000	0.0098		S glKkg		000	70 - 060	00	63

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	733		03 - 7/ 3
7i4-Chfluorobenzene (Surr)	00		03 - 7/ 3

Lab Sample ID: 880-26494-A-1-D MS

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50430

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bnt znt n	<0.00098	2 F1 FC	0.0998	0.08P36		S glKkg		87	70 - 060		
Toimnt n	<0.00098	2 F1 FC	0.0998	0.07716		S glKkg		77	70 - 060		
s Eyibnt znt n	<0.00098	2 F1 FC	0.0998	0.0P60P	FC	S glKkg		P6	70 - 060		
S-Xyint n & p-Xyint n	<0.0069P	2 F1 FC	0.100	0.0C16P	FC	S glKkg		P	70 - 060		
o-Xyint n	<0.00098	2 F1 FC	0.0998	0.070C3		S glKkg		70	70 - 060		

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	779		03 - 7/ 3
7i4-Chfluorobenzene (Surr)	c7		03 - 7/ 3

Lab Sample ID: 880-26494-A-1-E MSD

Matrix: Solid

Analysis Batch: 50521

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 50430

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bnt znt n	<0.00098	2 F1 FC	0.000	0.06377	F1 FC	S glKkg		6P	70 - 060	86	63
Toimnt n	<0.00098	2 F1 FC	0.000	0.06P03	F1 FC	S glKkg		6P	70 - 060	76	63
s Eyibnt znt n	<0.00098	2 F1 FC	0.000	0.06797	F1 FC	S glKkg		68	70 - 060	30	63
S-Xyint n & p-Xyint n	<0.0069P	2 F1 FC	0.100	0.076C1	F1 FC	S glKkg		6P	70 - 060	C41	63
o-Xyint n	<0.00098	2 F1 FC	0.000	0.06P49	F1 FC	S glKkg		6P	70 - 060	P6	63

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	c7		03 - 7/ 3
7i4-Chfluorobenzene (Surr)	0D		03 - 7/ 3

Lab Sample ID: MB 880-50513/5-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50513

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bnt znt n	<0.00100	2	0.00100	S glKkg		04i0Pk16 C0:30	04i08k16 06:16	C
Toimnt n	<0.00100	2	0.00100	S glKkg		04i0Pk16 C0:30	04i08k16 06:16	C
s Eyibnt znt n	<0.00100	2	0.00100	S glKkg		04i0Pk16 C0:30	04i08k16 06:16	C
S-Xyint n & p-Xyint n	<0.00400	2	0.00400	S glKkg		04i0Pk16 C0:30	04i08k16 06:16	C

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t eE410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

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

Lab Sample ID: MB 880-50513/5-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50513

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xyint n	<0.00100	2	0.00100	S glKkg		04I0PK16 CC:30	04I08k16 06:16	C
Xyint nu, ToEI	<0.00400	2	0.00400	S glKkg		04I0PK16 CC:30	04I08k16 06:16	C
Surrogate	%Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	c9		03 - 7/ 3			342B129/ 77,: 3	342B09/ 3/,9/	7
7i4-Chfluorobenzene (Surr)	c0		03 - 7/ 3			342B129/ 77,: 3	342B09/ 3/,9/	7

Lab Sample ID: LCS 880-50513/1-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
Bnt znt n	0.000	0.0084		S glKkg		008	70 - 060	
Toimnt n	0.000	0.0046		S glKkg		004	70 - 060	
s Eyyibnt znt n	0.000	0.09709		S glKkg		97	70 - 060	
S-Xyint n & p-Xyint n	0.100	0.0908		S glKkg		9P	70 - 060	
o-Xyint n	0.000	0.0973C		S glKkg		98	70 - 060	
Surrogate	%Recovery	LCS Qualifier	Limits					
4-Bromofluorobenzene (Surr)	73:		03 - 7/ 3					
7i4-Chfluorobenzene (Surr)	777		03 - 7/ 3					

Lab Sample ID: LCSD 880-50513/2-A

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bnt znt n	0.000	0.0096		S glKkg		009	70 - 060	C	63
Toimnt n	0.000	0.0041		S glKkg		004	70 - 060	0	63
s Eyyibnt znt n	0.000	0.094P3		S glKkg		93	70 - 060	6	63
S-Xyint n & p-Xyint n	0.100	0.0837		S glKkg		96	70 - 060	6	63
o-Xyint n	0.000	0.0940C		S glKkg		94	70 - 060	4	63
Surrogate	%Recovery	LCSD Qualifier	Limits						
4-Bromofluorobenzene (Surr)	737		03 - 7/ 3						
7i4-Chfluorobenzene (Surr)	73c		03 - 7/ 3						

Lab Sample ID: 890-4449-A-1-D MS

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Bnt znt n	<0.0010C	2	0.0998	0.003P		S glKkg		00P	70 - 060
Toimnt n	<0.0010C	2	0.0998	0.0009		S glKkg		001	70 - 060
s Eyyibnt znt n	<0.0010C	2	0.0998	0.09114		S glKkg		91	70 - 060
S-Xyint n & p-Xyint n	<0.0040I	2	0.100	0.0790		S glKkg		90	70 - 060
o-Xyint n	<0.0010C	2	0.0998	0.09C31		S glKkg		91	70 - 060

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

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

Lab Sample ID: 890-4449-A-1-D MS

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 50513

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	734		03 - 7/ 3
7i4-Clfluorobenzene (Surr)	731		03 - 7/ 3

Lab Sample ID: 890-4449-A-1-E MSD

Matrix: Solid

Analysis Batch: 50621

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 50513

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Bnt znt n	<0.0010C	2	0.0990	0.0046		S gIKg		003	70 - 060	C	63
Toimt n	<0.0010C	2	0.0990	0.09964		S gIKg		000	70 - 060	6	63
s Hyibnt znt n	<0.0010C	2	0.0990	0.0909C		S gIKg		91	70 - 060	C	63
S-Xyint n & p-Xyint n	<0.00401	2	0.098	0.0781		S gIKg		90	70 - 060	0	63
o-Xyint n	<0.0010C	2	0.0990	0.09034		S gIKg		9C	70 - 060	C	63

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	733		03 - 7/ 3
7i4-Clfluorobenzene (Surr)	777		03 - 7/ 3

Lab Sample ID: MB 880-50514/5-A

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50514

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bnt znt n	<0.00100	2	0.00100	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C
Toimt n	<0.00100	2	0.00100	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C
s Hyibnt znt n	<0.00100	2	0.00100	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C
S-Xyint n & p-Xyint n	<0.00400	2	0.00400	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C
o-Xyint n	<0.00100	2	0.00100	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C
Xyint nu, ToEJ	<0.00400	2	0.00400	S gIKg		04i0Pk16 Cc:36	04i08k16 C9:4C	C

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	c9		03 - 7/ 3	342B129/ 77,; /	342B29/ 7c,47	7
7i4-Clfluorobenzene (Surr)	cD		03 - 7/ 3	342B129/ 77,; /	342B29/ 7c,47	7

Lab Sample ID: LCS 880-50514/1-A

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50514

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Bnt znt n	0.000	0.0989C		S gIKg		99	70 - 060
Toimt n	0.000	0.09311		S gIKg		93	70 - 060
s Hyibnt znt n	0.000	0.08913		S gIKg		89	70 - 060
S-Xyint n & p-Xyint n	0.100	0.078C		S gIKg		89	70 - 060
o-Xyint n	0.000	0.089PP		S gIKg		90	70 - 060

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	739		03 - 7/ 3

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t eE410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

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

Lab Sample ID: LCS 880-50514/1-A

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50514

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
7i4-Clfluorobenzene (Surr)	730		03 - 7/ 3

Lab Sample ID: LCSD 880-50514/2-A

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50514

Analyte		Spike	LCSD	LCSD				%Rec			
		Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Bnt znt n		0.000	0.0049		S gIKg		003	70 - 060	C3	63	
Toimt n		0.000	0.000P		S gIKg		001	70 - 060	CP	63	
s Eyibnt znt n		0.000	0.0066		S gIKg		006	70 - 060	C3	63	
S -Xyint n & p-Xyint n		0.100	0.1041		S gIKg		001	70 - 060	C4	63	
o-Xyint n		0.000	0.0014		S gIKg		001	70 - 060	C6	63	

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	734		03 - 7/ 3
7i4-Clfluorobenzene (Surr)	734		03 - 7/ 3

Lab Sample ID: 890-4452-1 MS

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: SW25

Prep Type: Total/NA

Prep Batch: 50514

Analyte	Sample	Sample	Spike	MS	MS			%Rec			
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Bnt znt n	<0.00C99	2	0.0998	0.08964		S gIKg		90	70 - 060		
Toimt n	<0.00C99	2	0.0998	0.080P0		S gIKg		8C	70 - 060		
s Eyibnt znt n	<0.00C99	2 FC	0.0998	0.0P7P4	FC	S gIKg		P8	70 - 060		
S -Xyint n & p-Xyint n	<0.00698	2 FC	0.100	0.064C	FC	S gIKg		P7	70 - 060		
o-Xyint n	<0.00C99	2 FC	0.0998	0.0P884	FC	S gIKg		P9	70 - 060		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	73:		03 - 7/ 3
7i4-Clfluorobenzene (Surr)	779		03 - 7/ 3

Lab Sample ID: 890-4452-1 MSD

Matrix: Solid

Analysis Batch: 50707

Client Sample ID: SW25

Prep Type: Total/NA

Prep Batch: 50514

Analyte	Sample	Sample	Spike	MSD	MSD			%Rec			
	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Bnt znt n	<0.00C99	2	0.0990	0.097P7		S gIKg		99	70 - 060	9	63
Toimt n	<0.00C99	2	0.0990	0.09C1P		S gIKg		91	70 - 060	C1	63
s Eyibnt znt n	<0.00C99	2 FC	0.0990	0.08019		S gIKg		8C	70 - 060	C7	63
S -Xyint n & p-Xyint n	<0.00698	2 FC	0.098	0.0383		S gIKg		80	70 - 060	C7	63
o-Xyint n	<0.00C99	2 FC	0.0990	0.08081		S gIKg		81	70 - 060	CP	63

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	73/		03 - 7/ 3
7i4-Clfluorobenzene (Surr)	73c		03 - 7/ 3

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QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

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

Lab Sample ID: MB 880-50621/8
Matrix: Solid
Analysis Batch: 50621

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Bnt znt n	<0.00100	2	0.00100	S g/Kg			04/07/16 C3:47	C
Toimt n	<0.00100	2	0.00100	S g/Kg			04/07/16 C3:47	C
s Hyibnt znt n	<0.00100	2	0.00100	S g/Kg			04/07/16 C3:47	C
S -Xyint n & p-Xyint n	<0.00400	2	0.00400	S g/Kg			04/07/16 C3:47	C
o-Xyint n	<0.00100	2	0.00100	S g/Kg			04/07/16 C3:47	C
Xyint nu, ToEj	<0.00400	2	0.00400	S g/Kg			04/07/16 C3:47	C
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	c7		03 - 7/ 3				342809/ 7: ,40	7
7i4-Clfluorobenzene (Surr)	733		03 - 7/ 3				342809/ 7: ,40	7

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

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

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UoiE n RUt gn OjgUt E u (5 RO)-I P-I O	<30.0	2	30.0	S g/Kg		04/04/16 07:64	04/04/16 07:37	C
Dœuni RUt gn OjgUt E u (Ovnj I O-I 18)	<30.0	2	30.0	S g/Kg		04/04/16 07:64	04/04/16 07:37	C
Oli RUt gn OjgUt E u (Ovnj I 18-I 6P)	<30.0	2	30.0	S g/Kg		04/04/16 07:64	04/04/16 07:37	C
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
7-t aloroo85ne	74/	S7p	03 - 7/ 3			342849/ 30,/ 4	342849/ 30,: 0	7
o-yer6aen+I	77D		03 - 7/ 3			342849/ 30,/ 4	342849/ 30,: 0	7

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

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
5 UoiE n RUt gn OjgUt E u (5 RO)-I P-I O	0000	86P.C		S g/Kg		84	70 - 060
Dœuni RUt gn OjgUt E u (Ovnj I O-I 18)	0000	909.8		S g/Kg		91	70 - 060
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
7-t aloroo85ne	791		03 - 7/ 3				
o-yer6aen+I	c1		03 - 7/ 3				

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

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
5 UoiE n RUt gn OjgUt E u (5 RO)-I P-I O	0000	966.P		S g/Kg		96	70 - 060	00	10

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QC Sample Results

1. **Identify the main components of the system.**

Job ID: 890-4431-C
GD5 : 06| C338C9P

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

Lab Sample ID: LCSD 880-50296/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50277

Prep Batch: 50296

Rec RPD

Analyte	Spike Added	LCS D Result	LCS D Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Demonstration of Ojigut du (Ovnj I CO-I 18)	COO	9P3.3		S g/Kg		97	70 - CO	3	10

	LCS D	LCS D	
Surrogate	%Recovery	Qualifier	Limits
7-t aloroo85Tne	734		03 - 7/ 3
o-ver6aent/	D8		03 - 7/ 3

Lab Sample ID: 880-26738-A-1-E MS

Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50277

Prep Batch: 50296

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
5 Uuoie n RU gn OjgU t u	<49.9	2	998	0060		Sg/Kg		009	70 - 060		

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
7-t aloroo85Tne	777		03 - 7/ 3
o-ver6aen+I	0:		03 - 7/ 3

Lab Sample ID: 880-26738-A-1-F MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50277

Prep Batch: 50296

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec COP	%Rec Limits	RPD	RPD Limit
5 Uuoie n RUt gn OjgUt e u	<49.9	2	999	C10C		Sg/Kg			70 - 060	P	10

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
7-t aloroo85Tne	779		03 - 7/ 3
o-ver6aen+I	0:		03 - 7/ 3

Lab Sample ID: MB 880-50297/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 50279

Prep Batch: 50297

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
5 Uuoie n Ru t gn OjgUt e u	<30.0	2	30.0	Sg/Kg		04/04/16 07:69	04/04/16 07:37	C

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
7-t aloroo85Tne	747	S7p	03 - 7/ 3	3423429/ 30./ c	3423429/ 30.: 0	7
o-ver6aent/	71/	S7p	03 - 7/ 3	3423429/ 30./ c	3423429/ 30.: 0	7

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QC Sample Results

1. **Identify the main components of the system.**

Job ID: 890-4431-C
GD5 : 06| C338C9P

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

Lab Sample ID: LCS 880-50297/2-A
Matrix: Solid
Analysis Batch: 50279

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 50297

			Spike	LCS	LCS			%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
5 Uuoie n Ru t gn OjgUt e u (5 RO)-I P-I QO			Q000	849.4		S gIKg		83	70 - C60	
Dæuni Ru t gn OjgUt e u (Ovnj l QO-l 18)			Q000	960.7		S gIKg		96	70 - C60	
		LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits							
7-t aloroo85Tne	773		03 - 7/ 3							
o-ver6æent+	79:		03 - 7/ 3							

Lab Sample ID: LCSD 880-50297/3-A
Matrix: Solid
Analysis Batch: 50279

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50297

[illegible]

Lab Sample ID: 890-4452-16 MS
Matrix: Solid
Analysis Batch: 50279

Client Sample ID: FS31
Prep Type: Total/NA
Prep Batch: 50297

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier							
5 Uuoie n Ru t gn Oj gUt d u (5 RO)-I P-I 00	<49.9	2	998	991.7		S gIKg		9P		70 - C60		
Dæuni Ru t gn Oj gUt d u (Ovnj I 00-I 18)	<49.9	2	998	0000		S gIKg		000		70 - C60		
Surrogate	MS %Recovery	MS Qualifier	MS Limits									
7-t aloroo85Tne	739		03 - 7/ 3									
o-yer6æen+I	730		03 - 7/ 3									

Lab Sample ID: 890-4452-16 MSD
Matrix: Solid
Analysis Batch: 50279

Client Sample ID: FS31
Prep Type: Total/NA
Prep Batch: 50297

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
5 Uuoie n Ru t gn OjgUt e u (5 RO)-I P-I O	<49.9	2	999	981.3		S gIKg		93	70 - 060	C	10
Dæuni Ru t gn OjgUt e u (Ovnj I O)-I 18)	<49.9	2	999	0081		S gIKg		008	70 - 060	6	10
Surrogate	MSD %Recovery	MSD Qualifier	MSD Limits								
7-t aloroo85Tne	733		03 - 7/ 3								

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QC Sample Results

Lab Sample ID: 890-4452-16 MSD
Matrix: Solid
Analysis Batch: 50279

Client Sample ID: FS31
Prep Type: Total/NA
Prep Batch: 50297

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

Surrogate	MSD %Recovery	MSD Qualifier	Limits
o-yer6aen+I	73/		03 - 7/ 3

Method: 300.0 - Anions, Ion Chromatography

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

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
I hiojæln	<3.00	2	3.00	S g/Kg			04K08k16 C4:18	C

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

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
I hiojæln	130	130.7		S g/Kg		000	90 - 000

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

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
I hiojæln	130	130.7		S g/Kg		000	90 - 000	0	10

Lab Sample ID: 890-4452-1 MS
Matrix: Solid
Analysis Batch: 50729

Client Sample ID: SW25
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
I hiojæln	P6.3		130	193.6		S g/Kg		91	90 - 000

Lab Sample ID: 890-4452-1 MSD
Matrix: Solid
Analysis Batch: 50729

Client Sample ID: SW25
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
I hiojæln	P6.3		130	193.0		S g/Kg		91	90 - 000	0	10

Lab Sample ID: MB 880-50493/1-A
Matrix: Solid
Analysis Batch: 50730

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
I hiojæln	<3.00	2	3.00	S g/Kg			04K08k16 C4:C7	C

QC Sample Results

Int Est uoinS
r jon/ EGE: r oLnj aULn 2 t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-50493/2-A			Client Sample ID: Lab Control Sample							
Matrix: Solid			Prep Type: Soluble							
Analysis Batch: 50730										
Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
I hiojæln			130	131.0		S gIKg		00C	90 - 000	

Lab Sample ID: LCSD 880-50493/3-A			Client Sample ID: Lab Control Sample Dup							
Matrix: Solid			Prep Type: Soluble							
Analysis Batch: 50730										
Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
I hiojæln			130	131.9		S gIKg		00C	90 - 000	0 10

Lab Sample ID: 890-4452-16 MS			Client Sample ID: FS31							
Matrix: Solid			Prep Type: Soluble							
Analysis Batch: 50730										
Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
I hiojæln	0600		C1P0	1300		S gIKg		9P	90 - 000	

Lab Sample ID: 890-4452-16 MSD			Client Sample ID: FS31							
Matrix: Solid			Prep Type: Soluble							
Analysis Batch: 50730										
Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD Limit
I hiojæln	0600		C1P0	1309		S gIKg		97	90 - 000	0 10

QC Association Summary

Client EstuoinS
r jon/ EGE: r oLnj aUln 2 t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

GC VOA

Prep Batch: 4980L

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
MB 880-3041PK-A	MnEthod BiUt L	ToELJNA	Goied	3063	

Prep Batch: 49859

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-13	FG43	ToELJNA	Goied	3063	
MB 880-30460K3-A	MnEthod BiUt L	ToELJNA	Goied	3063	
al G 880-30460KA	aUb l ot Epoi GUS Vln	ToELJNA	Goied	3063	
al GD 880-30460Kl-A	aUb l ot Epoi GUS Vln DmW	ToELJNA	Goied	3063	
880-1P494-A-C-D MG	MUEE7 GMLn	ToELJNA	Goied	3063	
880-1P494-A-Cs MGD	MUEE7 GMLn DmWV UEn	ToELJNA	Goied	3063	

Prep Batch: 49415

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-1C	FG18	ToELJNA	Goied	3063	
890-4431-11	FG19	ToELJNA	Goied	3063	
890-4431-16	FG60	ToELJNA	Goied	3063	
890-4431-14	FG44	ToELJNA	Goied	3063	
MB 880-30306K3-A	MnEthod BiUt L	ToELJNA	Goied	3063	
al G 880-30306KA	aUb l ot Epoi GUS Vln	ToELJNA	Goied	3063	
al GD 880-30306Kl-A	aUb l ot Epoi GUS Vln DmW	ToELJNA	Goied	3063	
890-4449-A-C-D MG	MUEE7 GMLn	ToELJNA	Goied	3063	
890-4449-A-Cs MGD	MUEE7 GMLn DmWV UEn	ToELJNA	Goied	3063	

Prep Batch: 49418

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToELJNA	Goied	3063	
890-4431-1	FG69	ToELJNA	Goied	3063	
890-4431-6	FG40	ToELJNA	Goied	3063	
890-4431-4	FG4C	ToELJNA	Goied	3063	
890-4431-3	FG41	ToELJNA	Goied	3063	
890-4431-P	FG46	ToELJNA	Goied	3063	
890-4431-x	FG4P	ToELJNA	Goied	3063	
890-4431-8	FG4x	ToELJNA	Goied	3063	
890-4431-9	FG48	ToELJNA	Goied	3063	
890-4431-00	FG49	ToELJNA	Goied	3063	
890-4431-0C	FG30	ToELJNA	Goied	3063	
890-4431-C1	FG14	ToELJNA	Goied	3063	
890-4431-06	FG13	ToELJNA	Goied	3063	
890-4431-C4	FG1P	ToELJNA	Goied	3063	
890-4431-C3	FG1x	ToELJNA	Goied	3063	
890-4431-CP	FG6C	ToELJNA	Goied	3063	
890-4431-Cx	FG61	ToELJNA	Goied	3063	
890-4431-C8	FG66	ToELJNA	Goied	3063	
890-4431-C9	FG64	ToELJNA	Goied	3063	
890-4431-10	FG63	ToELJNA	Goied	3063	
MB 880-303C4K3-A	MnEthod BiUt L	ToELJNA	Goied	3063	
al G 880-303C4KA	aUb l ot Epoi GUS Vln	ToELJNA	Goied	3063	
al GD 880-303C4Kl-A	aUb l ot Epoi GUS Vln DmW	ToELJNA	Goied	3063	
890-4431-CMG	Gp 13	ToELJNA	Goied	3063	
890-4431-CMGD	Gp 13	ToELJNA	Goied	3063	

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QC Association Summary

Client EstuoinS
r jon/ EGD: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

GC VOA

Analysis Batch: 49401

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-13	FG43	ToEJKNVA	Goied	801CB	30460
MB 880-3041P13-A	MnEthod BiUt L	ToEJKNVA	Goied	801CB	3041P
MB 880-30460K3-A	MnEthod BiUt L	ToEJKNVA	Goied	801CB	30460
al G 880-30460KCA	aUb l ot Epoi GUS Win	ToEJKNVA	Goied	801CB	30460
al GD 880-30460K1-A	aUb l ot Epoi GUS Win DmW	ToEJKNVA	Goied	801CB	30460
880-1P494-A-C-D MG	MUE7 GVNn	ToEJKNVA	Goied	801CB	30460
880-1P494-A-Cs MGD	MUE7 GVNn DmW UEn	ToEJKNVA	Goied	801CB	30460

Analysis Batch: 49L01

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-1C	FG18	ToEJKNVA	Goied	801CB	303C6
890-4431-11	FG19	ToEJKNVA	Goied	801CB	303C6
890-4431-16	FG60	ToEJKNVA	Goied	801CB	303C6
890-4431-14	FG44	ToEJKNVA	Goied	801CB	303C6
MB 880-303C6K3-A	MnEthod BiUt L	ToEJKNVA	Goied	801CB	303C6
MB 880-30P1C8	MnEthod BiUt L	ToEJKNVA	Goied	801CB	
al G 880-303C6KCA	aUb l ot Epoi GUS Win	ToEJKNVA	Goied	801CB	303C6
al GD 880-303C6K1-A	aUb l ot Epoi GUS Win DmW	ToEJKNVA	Goied	801CB	303C6
890-4449-A-C-D MG	MUE7 GVNn	ToEJKNVA	Goied	801CB	303C6
890-4449-A-Cs MGD	MUE7 GVNn DmW UEn	ToEJKNVA	Goied	801CB	303C6

Analysis Batch: 49LL8

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-1	FG69	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-6	FG40	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-4	FG4C	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-3	FG41	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-P	FG46	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-x	FG4P	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-8	FG4x	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-9	FG48	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-00	FG49	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-CC	FG30	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-C1	FG14	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-06	FG13	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-C4	FG1P	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-C3	FG1x	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-CP	FG6C	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-Cx	FG61	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-C8	FG66	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-C9	FG64	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-10	FG63	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-1C	FG18	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-11	FG19	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-16	FG60	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-14	FG44	ToEJKNVA	Goied	ToEJ BTs X	
890-4431-13	FG43	ToEJKNVA	Goied	ToEJ BTs X	

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QC Association Summary

Int Est uoinS
r jon/ EGE: r oLnj aULn 2t e410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

GC VOA

Analysis Batch: 49292

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToEJIKNA	Goied	801CB	303C4
890-4431-1	FG69	ToEJIKNA	Goied	801CB	303C4
890-4431-6	FG40	ToEJIKNA	Goied	801CB	303C4
890-4431-4	FG4C	ToEJIKNA	Goied	801CB	303C4
890-4431-3	FG41	ToEJIKNA	Goied	801CB	303C4
890-4431-P	FG46	ToEJIKNA	Goied	801CB	303C4
890-4431-x	FG4P	ToEJIKNA	Goied	801CB	303C4
890-4431-8	FG4x	ToEJIKNA	Goied	801CB	303C4
890-4431-9	FG48	ToEJIKNA	Goied	801CB	303C4
890-4431-O0	FG49	ToEJIKNA	Goied	801CB	303C4
890-4431-CC	FG30	ToEJIKNA	Goied	801CB	303C4
890-4431-C1	FG14	ToEJIKNA	Goied	801CB	303C4
890-4431-O6	FG13	ToEJIKNA	Goied	801CB	303C4
890-4431-C4	FG1P	ToEJIKNA	Goied	801CB	303C4
890-4431-C3	FG1x	ToEJIKNA	Goied	801CB	303C4
890-4431-CP	FG6C	ToEJIKNA	Goied	801CB	303C4
890-4431-Cx	FG61	ToEJIKNA	Goied	801CB	303C4
890-4431-C8	FG66	ToEJIKNA	Goied	801CB	303C4
890-4431-C9	FG64	ToEJIKNA	Goied	801CB	303C4
890-4431-10	FG63	ToEJIKNA	Goied	801CB	303C4
MB 880-303C4K3-A	MnEthod BiUt L	ToEJIKNA	Goied	801CB	303C4
al G 880-303C4K3-A	aUb l ot Epoi GUS Vln	ToEJIKNA	Goied	801CB	303C4
al GD 880-303C4K1-A	aUb l ot Epoi GUS Vln DmW	ToEJIKNA	Goied	801CB	303C4
890-4431-CMG	Gp 13	ToEJIKNA	Goied	801CB	303C4
890-4431-CMGD	Gp 13	ToEJIKNA	Goied	801CB	303C4

GC Semi VOA

Analysis Batch: 49022

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-1	FG69	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-6	FG40	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-4	FG4C	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-3	FG41	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-P	FG46	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-x	FG4P	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-8	FG4x	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-9	FG48	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-O0	FG49	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-CC	FG30	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-C1	FG14	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-O6	FG13	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-C4	FG1P	ToEJIKNA	Goied	80C3B NM	3019P
890-4431-C3	FG1x	ToEJIKNA	Goied	80C3B NM	3019P
MB 880-3019PK3-A	MnEthod BiUt L	ToEJIKNA	Goied	80C3B NM	3019P
al G 880-3019PK1-A	aUb l ot Epoi GUS Vln	ToEJIKNA	Goied	80C3B NM	3019P
al GD 880-3019PK6-A	aUb l ot Epoi GUS Vln DmW	ToEJIKNA	Goied	80C3B NM	3019P
880-1Px68-A-C-s MG	MUEE7 GVLn	ToEJIKNA	Goied	80C3B NM	3019P
880-1Px68-A-C-F MGD	MUEE7 GVLn DmW Uln	ToEJIKNA	Goied	80C3B NM	3019P

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QC Association Summary

Int Est uoinS
r jon/ EGE: r oLnj aUln 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

GC Semi VOA

Analysis Batch: 49026

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CP	FG6C	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-Cx	FG61	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-C8	FG66	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-C9	FG64	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-10	FG63	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-1C	FG18	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-11	FG19	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-16	FG60	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-14	FG44	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-13	FG43	ToEJIKNA	Goied	80C3B NM	3019x
MB 880-3019xKC-A	MnEthod BiUt L	ToEJIKNA	Goied	80C3B NM	3019x
al G 880-3019xKI-A	aUb I ot Epoi GUS Wln	ToEJIKNA	Goied	80C3B NM	3019x
al GD 880-3019xK6-A	aUb I ot Epoi GUS Wln DmW	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-CP MG	FG6C	ToEJIKNA	Goied	80C3B NM	3019x
890-4431-CP MGD	FG6C	ToEJIKNA	Goied	80C3B NM	3019x

Prep Batch: 4906L

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-1	FG69	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-6	FG40	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-4	FG4C	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-3	FG41	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-P	FG46	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-x	FG4P	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-8	FG4x	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-9	FG48	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C0	FG49	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-CC	FG30	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C1	FG14	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C6	FG13	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C4	FG1P	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C3	FG1x	ToEJIKNA	Goied	80C3NM r jnW	
MB 880-3019PK-A	MnEthod BiUt L	ToEJIKNA	Goied	80C3NM r jnW	
al G 880-3019PKI-A	aUb I ot Epoi GUS Wln	ToEJIKNA	Goied	80C3NM r jnW	
al GD 880-3019PK6-A	aUb I ot Epoi GUS Wln DmW	ToEJIKNA	Goied	80C3NM r jnW	
880-1Px68-A-C-s MG	MUEE7 GVLn	ToEJIKNA	Goied	80C3NM r jnW	
880-1Px68-A-C-F MGD	MUEE7 GVLn DmW Uln	ToEJIKNA	Goied	80C3NM r jnW	

Prep Batch: 49062

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CP	FG6C	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-Cx	FG61	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C8	FG66	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-C9	FG64	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-10	FG63	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-1C	FG18	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-11	FG19	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-16	FG60	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-14	FG44	ToEJIKNA	Goied	80C3NM r jnW	
890-4431-13	FG43	ToEJIKNA	Goied	80C3NM r jnW	

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QC Association Summary

Int Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

GC Semi VOA (Continue3)

Prep Batch: 49062 (Continue3)

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
MB 880-3019xICA	MnEod BiUt L	ToEJkNA	Goied	80C3NM r jnW	
al G 880-3019xkl-A	aUb l ot Epoi GUS Wh	ToEJkNA	Goied	80C3NM r jnW	
al GD 880-3019xkl6-A	aUb l ot Epoi GUS Wh DmW	ToEJkNA	Goied	80C3NM r jnW	
890-4431-CP MG	FG6C	ToEJkNA	Goied	80C3NM r jnW	
890-4431-CP MGD	FG6C	ToEJkNA	Goied	80C3NM r jnW	

Analysis Batch: 495L5

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	ToEJkNA	Goied	80C3 NM	
890-4431-1	FG69	ToEJkNA	Goied	80C3 NM	
890-4431-6	FG40	ToEJkNA	Goied	80C3 NM	
890-4431-4	FG4C	ToEJkNA	Goied	80C3 NM	
890-4431-3	FG41	ToEJkNA	Goied	80C3 NM	
890-4431-P	FG46	ToEJkNA	Goied	80C3 NM	
890-4431-x	FG4P	ToEJkNA	Goied	80C3 NM	
890-4431-8	FG4x	ToEJkNA	Goied	80C3 NM	
890-4431-9	FG48	ToEJkNA	Goied	80C3 NM	
890-4431-O0	FG49	ToEJkNA	Goied	80C3 NM	
890-4431-CC	FG30	ToEJkNA	Goied	80C3 NM	
890-4431-C1	FG14	ToEJkNA	Goied	80C3 NM	
890-4431-C6	FG13	ToEJkNA	Goied	80C3 NM	
890-4431-C4	FG1P	ToEJkNA	Goied	80C3 NM	
890-4431-C3	FG1x	ToEJkNA	Goied	80C3 NM	
890-4431-CP	FG6C	ToEJkNA	Goied	80C3 NM	
890-4431-Cx	FG61	ToEJkNA	Goied	80C3 NM	
890-4431-C8	FG66	ToEJkNA	Goied	80C3 NM	
890-4431-C9	FG64	ToEJkNA	Goied	80C3 NM	
890-4431-10	FG63	ToEJkNA	Goied	80C3 NM	
890-4431-1C	FG18	ToEJkNA	Goied	80C3 NM	
890-4431-11	FG19	ToEJkNA	Goied	80C3 NM	
890-4431-16	FG60	ToEJkNA	Goied	80C3 NM	
890-4431-14	FG44	ToEJkNA	Goied	80C3 NM	
890-4431-13	FG43	ToEJkNA	Goied	80C3 NM	

7 PbCHC

beach Batch: 498/ 0

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	Goinbin	Goied	DI anU/ h	
890-4431-1	FG69	Goinbin	Goied	DI anU/ h	
890-4431-6	FG40	Goinbin	Goied	DI anU/ h	
890-4431-4	FG4C	Goinbin	Goied	DI anU/ h	
890-4431-3	FG41	Goinbin	Goied	DI anU/ h	
890-4431-P	FG46	Goinbin	Goied	DI anU/ h	
890-4431-x	FG4P	Goinbin	Goied	DI anU/ h	
890-4431-8	FG4x	Goinbin	Goied	DI anU/ h	
890-4431-9	FG48	Goinbin	Goied	DI anU/ h	
890-4431-O0	FG49	Goinbin	Goied	DI anU/ h	
MB 880-30481ICA	MnEod BiUt L	Goinbin	Goied	DI anU/ h	
al G 880-30481kl-A	aUb l ot Epoi GUS Wh	Goinbin	Goied	DI anU/ h	
al GD 880-30481kl6-A	aUb l ot Epoi GUS Wh DmW	Goinbin	Goied	DI anU/ h	

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QC Association Summary

Client EstuoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

7 PbCHC (Continue3)

beach Batch: 498/ 0 (Continue3)

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CMG	Gp 13	Goinbin	Goiel	DI anU/ h	
890-4431-CMGD	Gp 13	Goinbin	Goiel	DI anU/ h	

beach Batch: 49865

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CC	FG30	Goinbin	Goiel	DI anU/ h	
890-4431-C1	FG14	Goinbin	Goiel	DI anU/ h	
890-4431-C6	FG13	Goinbin	Goiel	DI anU/ h	
890-4431-C4	FG1P	Goinbin	Goiel	DI anU/ h	
890-4431-C3	FG1x	Goinbin	Goiel	DI anU/ h	
890-4431-CP	FG6C	Goinbin	Goiel	DI anU/ h	
890-4431-Cx	FG61	Goinbin	Goiel	DI anU/ h	
890-4431-C8	FG66	Goinbin	Goiel	DI anU/ h	
890-4431-C9	FG64	Goinbin	Goiel	DI anU/ h	
890-4431-10	FG63	Goinbin	Goiel	DI anU/ h	
890-4431-1C	FG18	Goinbin	Goiel	DI anU/ h	
890-4431-11	FG19	Goinbin	Goiel	DI anU/ h	
890-4431-16	FG60	Goinbin	Goiel	DI anU/ h	
890-4431-14	FG44	Goinbin	Goiel	DI anU/ h	
890-4431-13	FG43	Goinbin	Goiel	DI anU/ h	
MB 880-30496KA	MnEthod BiUt L	Goinbin	Goiel	DI anU/ h	
al G 880-30496Kl-A	aUb l ot Epoi GUS Vln	Goinbin	Goiel	DI anU/ h	
al GD 880-30496K6-A	aUb l ot Epoi GUS Vln DmW	Goinbin	Goiel	DI anU/ h	
890-4431-CP MG	FG6C	Goinbin	Goiel	DI anU/ h	
890-4431-CP MGD	FG6C	Goinbin	Goiel	DI anU/ h	

Analysis Batch: 49206

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-C	Gp 13	Goinbin	Goiel	600.0	30481
890-4431-1	FG69	Goinbin	Goiel	600.0	30481
890-4431-6	FG40	Goinbin	Goiel	600.0	30481
890-4431-4	FG4C	Goinbin	Goiel	600.0	30481
890-4431-3	FG41	Goinbin	Goiel	600.0	30481
890-4431-P	FG46	Goinbin	Goiel	600.0	30481
890-4431-x	FG4P	Goinbin	Goiel	600.0	30481
890-4431-8	FG4x	Goinbin	Goiel	600.0	30481
890-4431-9	FG48	Goinbin	Goiel	600.0	30481
890-4431-00	FG49	Goinbin	Goiel	600.0	30481
MB 880-30481KA	MnEthod BiUt L	Goinbin	Goiel	600.0	30481
al G 880-30481Kl-A	aUb l ot Epoi GUS Vln	Goinbin	Goiel	600.0	30481
al GD 880-30481K6-A	aUb l ot Epoi GUS Vln DmW	Goinbin	Goiel	600.0	30481
890-4431-CMG	Gp 13	Goinbin	Goiel	600.0	30481
890-4431-CMGD	Gp 13	Goinbin	Goiel	600.0	30481

Analysis Batch: 49259

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CC	FG30	Goinbin	Goiel	600.0	30496
890-4431-C1	FG14	Goinbin	Goiel	600.0	30496
890-4431-C6	FG13	Goinbin	Goiel	600.0	30496
890-4431-C4	FG1P	Goinbin	Goiel	600.0	30496
890-4431-C3	FG1x	Goinbin	Goiel	600.0	30496

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QC Association Summary

Client Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4431-C
GD5 : 06I C338C9P

7 PbCHC (Continue3)

Analysis Batch: 49259 (Continue3)

bal Sample ID	Client Sample ID	Prep Mype	x atrid	x etho3	Prep Batch
890-4431-CP	FG6C	Goinbin	Goiel	600.0	30496
890-4431-Cx	FG61	Goinbin	Goiel	600.0	30496
890-4431-C8	FG66	Goinbin	Goiel	600.0	30496
890-4431-C9	FG64	Goinbin	Goiel	600.0	30496
890-4431-10	FG63	Goinbin	Goiel	600.0	30496
890-4431-1C	FG18	Goinbin	Goiel	600.0	30496
890-4431-11	FG19	Goinbin	Goiel	600.0	30496
890-4431-16	FG60	Goinbin	Goiel	600.0	30496
890-4431-14	FG44	Goinbin	Goiel	600.0	30496
890-4431-13	FG43	Goinbin	Goiel	600.0	30496
MB 880-30496K-A	MnEthod BiUt L	Goinbin	Goiel	600.0	30496
al G 880-30496Kl-A	aUb l ot Epoi GUS Wln	Goinbin	Goiel	600.0	30496
al GD 880-30496K6-A	aUb l ot Epoi GUS Wln DmW	Goinbin	Goiel	600.0	30496
890-4431-CP MG	FG6C	Goinbin	Goiel	600.0	30496
890-4431-CP MGD	FG6C	Goinbin	Goiel	600.0	30496

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: SF 05
Date Collectex: 9d/08/0d 39:95
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-3
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.05 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 20:10	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 15:05	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 12:30	SMC	EET MID

Client Sample ID: NSd8
Date Collectex: 9d/08/0d 39:39
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-0
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.01 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 20:50	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 15:23	AJ	EET MID
Soluble	Leach	DI Leach			3.01 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:04	SMC	EET MID

Client Sample ID: NS49
Date Collectex: 9d/08/0d 39:09
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-d
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.9X g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 20:31	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 15:4X	AJ	EET MID
Soluble	Leach	DI Leach			3.04 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:09	SMC	EET MID

Client Sample ID: NS43
Date Collectex: 9d/08/0d 39:05
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-4
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.93 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 21:11	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS43

Date Collectex: 9d/08/0d 39:05

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-4

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 14:08	AJ	EET MID
Soluble	Leach	DI Leach			3.03 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:24	SMC	EET MID

Client Sample ID: NS40

Date Collectex: 9d/08/0d 39:d9

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-5

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.03 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 21:51	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.05 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 14:50	AJ	EET MID
Soluble	Leach	DI Leach			3.05 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:29	SMC	EET MID

Client Sample ID: NS4d

Date Collectex: 9d/08/0d 33:35

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-v

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 21:32	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 13:14	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:55	SMC	EET MID

Client Sample ID: NS4v

Date Collectex: 9d/08/0d 33:d9

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-7

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.05 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 22:12	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 13:40	AJ	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS4v
Date Collectex: 9d/08/0d 33:d9
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-7
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Soluble	Leach	DI Leach			4.98 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:58	SMC	EET MID

Client Sample ID: NS47
Date Collectex: 9d/08/0d 33:d5
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-A
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.01 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 22:55	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 16:02	AJ	EET MID
Soluble	Leach	DI Leach			4.9X g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:45	SMC	EET MID

Client Sample ID: NS4A
Date Collectex: 9d/08/0d 33:49
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-8
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 22:35	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 16:25	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:48	SMC	EET MID

Client Sample ID: NS48
Date Collectex: 9d/08/0d 33:45
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-39
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.05 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/08/25 25:14	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.05 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 16:43	AJ	EET MID
Soluble	Leach	DI Leach			3.05 g	30 mL	30482	04/06/25 10:18	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X29	04/08/25 15:35	SMC	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS59

Date Collectex: 9d/08/0d 33:59

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-33

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.99 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 01:04	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 1X:0X	AJ	EET MID
Soluble	Leach	DI Leach			4.9Xg	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 13:13	SMC	EET MID

Client Sample ID: NS04

Date Collectex: 9d/08/0d 30:39

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-30

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.96 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 01:24	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 1X:29	AJ	EET MID
Soluble	Leach	DI Leach			3.03 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		3	30 mL	30 mL	30X50	04/08/25 13:20	SMC	EET MID

Client Sample ID: NS05

Date Collectex: 9d/08/0d 30:95

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-3d

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 01:44	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 1X:30	AJ	EET MID
Soluble	Leach	DI Leach			3 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 13:23	SMC	EET MID

Client Sample ID: NS0v

Date Collectex: 9d/08/0d 3d:35

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-34

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.03 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 02:03	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS0v

Date Collectex: 9d/08/0d 3d:35

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-34

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 18:12	AJ	EET MID
Soluble	Leach	DI Leach			3.01 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 13:50	SMC	EET MID

Client Sample ID: NS07

Date Collectex: 9d/08/0d 3d:09

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-35

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.9X g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 02:23	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 09:25	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	30296	04/04/25 09:54	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302XX	04/04/25 18:54	AJ	EET MID
Soluble	Leach	DI Leach			3.02 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 13:54	SMC	EET MID

Client Sample ID: NSd3

Date Collectex: 9d/08/0d 3d:05

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-3v

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.99 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 02:46	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.05 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 10:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		3	30 mL	30 mL	30X50	04/10/25 12:04	SMC	EET MID

Client Sample ID: NSd0

Date Collectex: 9d/08/0d 3d:d9

Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-37

1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.93 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 05:06	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 11:53	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NSd0

Lab Sample ID: A89-4450-37

Date Collectex: 9d/08/0d 3d:d9

1 atriM Solix

Date 2 eceiRex: 9d/d9/0d 3d:4v

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Soluble	Leach	DI Leach			3.01 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/10/25 12:18	SMC	EET MID

Client Sample ID: NSdd

Lab Sample ID: A89-4450-3A

Date Collectex: 9d/08/0d 3d:59

1 atriM Solix

Date 2 eceiRex: 9d/d9/0d 3d:4v

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 05:26	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 11:3X	SM	EET MID
Soluble	Leach	DI Leach			3.05 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 13:39	SMC	EET MID

Client Sample ID: NSd4

Lab Sample ID: A89-4450-38

Date Collectex: 9d/08/0d 3d:55

1 atriM Solix

Date 2 eceiRex: 9d/d9/0d 3d:4v

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.96 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 05:4X	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 12:19	SM	EET MID
Soluble	Leach	DI Leach			3.03 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		3	30 mL	30 mL	30X50	04/08/25 16:15	SMC	EET MID

Client Sample ID: NSd5

Lab Sample ID: A89-4450-09

Date Collectex: 9d/08/0d 34:99

1 atriM Solix

Date 2 eceiRex: 9d/d9/0d 3d:4v

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	30314	04/06/25 11:35	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30X0X	04/09/25 04:0X	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:46	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 12:41	SM	EET MID
Soluble	Leach	DI Leach			3.03 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:18	SMC	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS0A
Date Collectex: 9d/08/0d 35:99
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-03
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.05 g	3 mL	30315	04/06/25 11:30	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30621	04/08/25 10:2X	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:29	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.05 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 15:05	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:25	SMC	EET MID

Client Sample ID: NS08
Date Collectex: 9d/08/0d 35:95
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-00
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.01 g	3 mL	30315	04/06/25 11:30	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30621	04/08/25 10:48	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:29	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 15:23	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:28	SMC	EET MID

Client Sample ID: NSd9
Date Collectex: 9d/08/0d 35:39
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-0d
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.99 g	3 mL	30315	04/06/25 11:30	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30621	04/08/25 11:08	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:29	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 15:4X	SM	EET MID
Soluble	Leach	DI Leach			4.93 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:52	SMC	EET MID

Client Sample ID: NS44
Date Collectex: 9d/08/0d 35:35
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-04
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.03 g	3 mL	30315	04/06/25 11:30	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30621	04/08/25 11:29	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/10/25 10:29	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Client Sample ID: NS44
Date Collectex: 9d/08/0d 35:35
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-04
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 14:08	SM	EET MID
Soluble	Leach	DI Leach			3.01 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:5X	SMC	EET MID

Client Sample ID: NS45
Date Collectex: 9d/08/0d 35:09
Date 2 eceiRex: 9d/d9/0d 3d:4v

Lab Sample ID: A89-4450-05
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	2 un	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.9X g	3 mL	30450	04/06/25 16:48	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	30321	04/0X/25 16:45	SM	EET MID
Total/NA	Analysis	Total BTE7		1			30664	04/08/25 09:11	SM	EET MID
Total/NA	Analysis	8013 NM		1			30565	04/03/25 12:20	SM	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	3029X	04/04/25 09:59	AJ	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	302X9	04/04/25 14:50	SM	EET MID
Soluble	Leach	DI Leach			3.02 g	30 mL	30495	04/06/25 10:29	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	30X50	04/08/25 16:42	SMC	EET MID

LaboratorT 2 eferences:
EET MID d Euroþns Mif lanf , 1211 W. Florif a Ave, Mif lanf , T7 X9X01, TEL (452)X04-3440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4432-1
SDG: 05C1338196

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-23	06-50-25

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
8013 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 420H

Job ID: 890-4432-1
SDG: 05C1338196

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8013 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8013B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
500.0	Anions, Ion Chromatography	EPA	EET MID
3053	Closed System Purge and Trap	SW846	EET MID
8013NM 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 (452)704-3440

Sample Summary

Client: Ensolum
r joæ/ tk3ite: r oLej aUle 2 nit 4S0H

Job ID: 890-441S-G
3D5 : 06CG18G9P

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
890-441S-G	3WS1	3olid	06KS9KS6 G0:01	06K60KS6 G6:4P
890-441S-S	F369	3olid	06KS9KS6 G0:G0	06K60KS6 G6:4P
890-441S-6	F340	3olid	06KS9KS6 G0:S0	06K60KS6 G6:4P
890-441S-4	F34G	3olid	06KS9KS6 G0:S1	06K60KS6 G6:4P
890-441S-1	F34S	3olid	06KS9KS6 G0:60	06K60KS6 G6:4P
890-441S-P	F346	3olid	06KS9KS6 G3:G1	06K60KS6 G6:4P
890-441S-7	F34P	3olid	06KS9KS6 G3:60	06K60KS6 G6:4P
890-441S-8	F347	3olid	06KS9KS6 G3:61	06K60KS6 G6:4P
890-441S-9	F348	3olid	06KS9KS6 G3:40	06K60KS6 G6:4P
890-441S-G0	F349	3olid	06KS9KS6 G3:41	06K60KS6 G6:4P
890-441S-GG	F310	3olid	06KS9KS6 G3:10	06K60KS6 G6:4P
890-441S-GS	F3S4	3olid	06KS9KS6 GS:G0	06K60KS6 G6:4P
890-441S-G6	F3S1	3olid	06KS9KS6 GS:01	06K60KS6 G6:4P
890-441S-G4	F3SP	3olid	06KS9KS6 GS:G1	06K60KS6 G6:4P
890-441S-GI	F3S7	3olid	06KS9KS6 GS:S0	06K60KS6 G6:4P
890-441S-GP	F36G	3olid	06KS9KS6 GS:S1	06K60KS6 G6:4P
890-441S-G7	F36S	3olid	06KS9KS6 GS:60	06K60KS6 G6:4P
890-441S-G8	F366	3olid	06KS9KS6 GS:10	06K60KS6 G6:4P
890-441S-G9	F364	3olid	06KS9KS6 GS:11	06K60KS6 G6:4P
890-441S-S0	F361	3olid	06KS9KS6 G4:00	06K60KS6 G6:4P
890-441S-SG	F3S8	3olid	06KS9KS6 G1:00	06K60KS6 G6:4P
890-441S-SS	F3S9	3olid	06KS9KS6 G1:01	06K60KS6 G6:4P
890-441S-S6	F360	3olid	06KS9KS6 G1:G0	06K60KS6 G6:4P
890-441S-S4	F344	3olid	06KS9KS6 G1:G1	06K60KS6 G6:4P
890-441S-S1	F341	3olid	06KS9KS6 G1:S0	06K60KS6 G6:4P



Environment Testing
Xenco

Chain of Custody

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

Work Order No: 4452

www.xenco.com Page 1 of 3

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	ANALYSIS REQUEST										Preservative Codes				
Project Number:	03C1558196	Due Date:	TAT starts the day received by the lab, if received by 4:30pm													None: NO	DI Water: H ₂ O		
Project Location:	Connor Whitman	Due Date:														Cool: Cool	MeOH: Me		
Sampler's Name:	Connor Whitman	Due Date:														HCL: HC	HNO ₃ : HN		
PO #:		Temp Blank:	Yes ☒ No ☐	Thermometer ID:	Wet Ice:	Yes ☒ No ☐											H ₂ SO ₄ : H ₂	NaOH: Na	
SAMPLE RECEIPT		Samples Received Intact:	Yes ☒ No ☐	Correction Factor:													NaHSO ₄ : HP		
Cooler Custody Seals:	Yes ☒ No ☐	Temperature Reading:	Yes ☒ No ☐	Corrected Temperature:	1.0											Na ₂ S ₂ O ₃ : NaSO ₃			
Sample Custody Seals:	Yes ☒ No ☐															Zn Acetate+NaOH: Zn			
Total Containers:																NaOH+Ascorbic Acid: SARC			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont											Sample Comments		
SV25	5	3/29/23	1005	0-4	C	1	CHLORIDES (EPA: 3000.0)											Incident ID:	
FS39	1	1010	4	4	1	1	TPH (8015)											MAB1834656162	
FS40	1	1020	4	4	1	1	BTEX (8021)											Cost Center:	
FS41	1	1025	4	4	1	1												1139851001	
FS42	1	1030	4	4	1	1												A/E:	
FS43	1	11:15	3	3	1	1												PA.2022.04878.EXP.01	
FS46	1	11:30	3	3	1	1													
FS47	1	11:35	3	3	1	1													
FS48	1	11:40	3	3	1	1													
FS49	1	11:45	3	3	1	1													

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 CWH	1 M. Green	1:40 3/30/23	2 J. Green	2 J. Green	3:30 3/30/23
3			4		
5			6		



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El Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Chain of Custody

Work Order No: _____

www.xenco.com Page 2 of 3

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	Pro. Code	ANALYSIS REQUEST																Preservative Codes					
Project Number:	03C1558196	☒ Routine ☐ Rush																		None: NO	DI Water: H ₂ O				
Project Location:		Due Date:																		Cool: Cool	MeOH: Me				
Sampler's Name:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm																		HCL: HC	HNO ₃ : HN				
PO #:																				H ₂ SO ₄ : H ₂	NaOH: Na				
SAMPLE RECEIPT	Temp Blank:	Yes	No	Wet Ice:	Yes	No																	H ₃ PO ₄ : HP		
	Samples Received Intact:	Yes	No	Thermometer ID:																	NaHSO ₄ : NABIS				
	Cooler Custody Seals:	Yes	No	Correction Factor:																	Na ₂ S ₂ O ₃ : NaSO ₃				
	Sample Custody Seals:	Yes	No	Temperature Reading:																	Zn Acetate+NaOH: Zn				
Total Containers:		Corrected Temperature:																		NaOH+Ascorbic Acid: SAPC					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	Parameters																Sample Comments		
	FS20	5	3/29/23	11:50	3'	C	1	CHLORIDES (EPA: 3000.0)																Incident ID:	
	FS24			12:10	4'		1	TPH (8015)																nAB1834656162	
	FS25			12:05	4'		1	BTEX (8021)																	
	FS26			1:15	4'		1																	Cost Center:	
	FS27			1:20	4'		1																	1139851001	
	FS31			1:25	4'		1																	APE:	
	FS32			1:30	4'		1																	PA.2022.04878.EXP.01	
	FS33			1:50	4'		1																		
	FS34			1:55	4'		1																		
	FS35			2:00	4'		1																		

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

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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Chit</i>	<i>McPhee</i>	1:40 3/30/23	<i>Doc GP</i>		
3					
5					



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Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-8199

Chain of Custody

Work Order No: _____

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	03C1558196	Due Date:			
Project Location:		TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Connor Whitman				
PO #:					
SAMPLE RECEIPT		Temp Blank:	Yes No	Moist Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:			
Cooler Custody Seals:	Yes No	Correction Factor:			
Sample Custody Seals:	Yes No	Temperature Reading:			
Total Containers:		Corrected Temperature:			
Parameters					
CHLORIDES (EPA: 3000.0)					
TPH (8015)					
BTEX (8021)					
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab Comp
FS28	S	3/29/23	3:00	4	C
FS29			3:05	4	
FS30			3:10	4	
FS44			3:15	4	
FS45			3:20	4	
Cdr					
ANALYSIS REQUEST					
Preservative Codes					
None: NO DI Water: H ₂ O					
Cool: Cool MeOH: Me					
HCL: HC HNO ₃ : HN					
H ₂ SO ₄ : H ₂ NaOH: Na					
H ₃ PO ₄ : HP					
NaHSO ₄ : NABIS					
Na ₂ S ₂ O ₅ : NaSO ₃					
Zn Acetate+NaOH: Zn					
NaOH+Ascorbic Acid: SAPC					
Sample Comments					
Incident ID: NAB1834656162					
Cost Center: 1139851001					
AFE: PA.2022 04878 EXP.01					

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 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	
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Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)
1 Cdr	11.09.23	1:40 3/30/23	2 Cdr
3			4
5			6

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4452-1

SDG Number: 03C1558196

Login Number: 4452

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4452-1

SDG Number: 03C1558196

Login Number: 4452

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/03/23 09:29 AM

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



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/3/2023 10:48:09 AM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4575-1

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
5/3/2023 10:48:09 AM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4575-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4575-1
SDG: 03C1558196

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier	Qualifier Description
S1+	Surrogate recovery exceeds control limits, 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 420H

Job ID: 890-4575-1
SDG: 03C1558196

Job ID: 890-4575-1**Laboratory: Eurofins Carlsbad****Narrative****Job Narrative
890-4575-1****Receipt**

The samples were received on 4/26/2023 8:06 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 3.4°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS23A (890-4575-1), FS22A (890-4575-2), SW27 (890-4575-3), SW28 (890-4575-4), FS43A (890-4575-5), FS48A (890-4575-6), FS49A (890-4575-7) and FS50A (890-4575-8).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: SW27 (890-4575-3), SW28 (890-4575-4) and FS43A (890-4575-5). 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 880-52138 and analytical batch 880-52172 was outside the upper control limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (MB 880-52172/8). Evidence of matrix interferences is not obvious.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-52172 recovered above the upper control limit for Benzene and Toluene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-52172/34).

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-52172 recovered above the upper control limit for Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene, o-Xylene and Xylenes, Total. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The associated sample is impacted: (CCV 880-52172/47).

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 880-52128 and analytical batch 880-52071 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-52128/2-A) and (LCSD 880-52128/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS23A (890-4575-1) and (890-4575-A-1-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: FS22A (890-4575-2), SW27 (890-4575-3), SW28 (890-4575-4), FS43A (890-4575-5), FS48A (890-4575-6), FS49A (890-4575-7) and FS50A (890-4575-8). 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.

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-52209 and analytical batch 880-52404 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.

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4575-1
SDG: 03C1558196

Job ID: 890-4575-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

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

i Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLjt aULt 2 Ems4H0<

3D5 : 06i | 118l 9P

Client Sample ID: FS23A

Lab Sample ID: 890-4575-1

Date Collected: 04/25/23 09:00

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
z t Et Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 H6:14	I
hoEt Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 H6:14	I
usyXbt Et Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 H6:14	I
G-&Xt Et p , -&Xt Et	. 0g0698	2	0g0698	GKlBK		04HCH6 1:66	04HCH6 H6:14	I
o-&Xt Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 H6:14	I
&Xt Et n7hosLe	. 0g0698	2	0g0698	GKlBK		04HCH6 1:66	04HCH6 H6:14	I

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		73 - 1/3	34272/ 1:./	34202/ 9/,: 4	1
1,4-di Fluorobenzene (Surr)	h1		73 - 1/3	34272/ 1:./	34202/ 9/,: 4	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLez hu &	. 0g0698	2	0g0698	GKlBK			01Hl H6 0:H	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	146		10g	GKlBK			04HCH6 C:0l	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnEt RUEt OjKUEtlm	. 10g	2	10g	GKlBK		04HCH6 6:48	04HCH6 4:46	I
(5 RO)-i P-i l O								
Diesel Range Organics (Over C10-C28)	95.2		10g	GKlBK		04HCH6 6:48	04HCH6 4:46	I
Oil Range Organics (Over C28-C36)	50.8		10g	GKlBK		04HCH6 6:48	04HCH6 4:46	I

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-c t lrooaEne	19h		73 - 1/3	34272/ 1/.,40	34272/ 14,4/	1
o-Terpt enyl	1: 7	S16	73 - 1/3	34272/ 1/.,40	34272/ 14,4/	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1220		4g9	GKlBK			01HlH6 6:1l	I

Client Sample ID: FS22A

Lab Sample ID: 890-4575-2

Date Collected: 04/25/23 11:25

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
z t Et Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 00:H	I
hoEt Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 00:H	I
usyXbt Et Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 00:H	I
G-&Xt Et p , -&Xt Et	. 0g0698	2	0g0698	GKlBK		04HCH6 1:66	04HCH6 00:H	I
o-&Xt Et	. 0g0l 99	2	0g0l 99	GKlBK		04HCH6 1:66	04HCH6 00:H	I
&Xt Et n7hosLe	. 0g0698	2	0g0698	GKlBK		04HCH6 1:66	04HCH6 00:H	I

uSjovEmi UjnbUf

Client Sample Results

i a Es uEnoSG

r jod / s3rd : r oLtj aULt 2 En4H0<

Job ID: 890-41C1-I

3D5 : 06i | 118l 9P

Client Sample ID: FS22A

Lab Sample ID: 890-4575-2

Date Collected: 04/25/23 11:25

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	197		73 - 1/3	34272/ 1: ,//	342h2/ 33,93	1
1,2,4-Trifluorobenzene (Surr)	h:		73 - 1/3	34272/ 1: ,//	342h2/ 33,93	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLez hu &	. 0g0698	2	0g0698	GK&BK	-		01K0l K-H6 0:H4	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLehr <	. 49g	2	49g	GK&BK	-		04K-BH6 C:0l	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnnoEt RUEKt OjKUEr m	. 49g	2	49g	GK&BK	-	04K-HH6 6:48	04K-HH6 1:4C	I
(5 RO)-i P-i l 0								
Dit nt eRUEKt OjKUEr m(Odt j	. 49g	2	49g	GK&BK	-	04K-HH6 6:48	04K-HH6 1:4C	I
i l 0-i HB)								
OleRUEKt OjKUEr m(Odt j i HB-i 6P)	. 49g	2	49g	GK&BK	-	04K-HH6 6:48	04K-HH6 1:4C	I

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-c t l orooa&ne	14:	S16	73 - 1/3	34272/ 1/ ,40	34272/ 1: ,47	1
o-Terpt enyl	1++	S16	73 - 1/3	34272/ 1/ ,40	34272/ 1: ,47	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	133		1gH	GK&BK	-		01K0H-H6 6:1P	I

Client Sample ID: SW27

Lab Sample ID: 890-4575-3

Date Collected: 04/25/23 11:30

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 0 - 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
zt Et Et	. 0g0l 99	2	0g0l 99	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I
hosEt Et	. 0g0l 99	2	0g0l 99	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I
usyX&t Et Et	. 0g0l 99	2	0g0l 99	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I
G-&X& Et p , -&X& Et	. 0g0698	2	0g0698	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I
o-&X& Et	. 0g0l 99	2	0g0l 99	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I
&X& Et n7hosLe	. 0g0698	2	0g0698	GK&BK	-	04K-HH6 1:66	04K-HH6 00:4C	I

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1/:	S16	73 - 1/3	34272/ 1: ,//	342h2/ 33,47	1
1,2,4-Trifluorobenzene (Surr)	h0		73 - 1/3	34272/ 1: ,//	342h2/ 33,47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLez hu &	. 0g0698	2	0g0698	GK&BK	-		01K0l K-H6 0:H4	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLehr <	. 10g	2	10g	GK&BK	-		04K-BH6 C:0l	I

uSjovEmi UenbUf

Client Sample Results

i a Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLjt aUIt 2 Ems4H0<

3D5 : 06i | 118l 9P

Client Sample ID: SW27

Lab Sample ID: 890-4575-3

Date Collected: 04/25/23 11:30

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 0 - 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnoeEt RUEKt OjKUErl m (5 RO)-i P-i I 0	. 10g	2	10g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:08	I
Drt nt eRUEKt OjKUErl m(Odt j i l 0-i HB)	. 10g	2	10g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:08	I
OleRUEKt OjKUErl m(Odt j i HB-i 6P)	. 10g	2	10g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:08	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-c t l o r o o a b n e	117		73 - 1/3			3429729/ 1/,40	3429729/ 1+,30	1
o-Terpt enyl	1/+	S16	73 - 1/3			3429729/ 1/,40	3429729/ 1+,30	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	343		4g99	GKlBK	-		01KHOH6 4:11	I

Client Sample ID: SW28

Lab Sample ID: 890-4575-4

Date Collected: 04/25/23 12:00

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 0 - 3

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
z t Et Et	. 0g0l 99	2	0g0l 99	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
hoEt Et	. 0g0l 99	2	0g0l 99	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
u s y X b t Et Et	. 0g0l 99	2	0g0l 99	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
G-&Xa Et p , -&Xa Et	. 0g0698	2	0g0698	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
o-&Xa Et	. 0g0l 99	2	0g0l 99	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
&Xa Et n7hosLe	. 0g0698	2	0g0698	GKlBK	-	04KHOH6 1:66	04KHOH6 01:16	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	1/+	S16	73 - 1/3			3429729/ 1:,,/	3429729/ 31,1/	1
1B-i Fluorobenzene (Surr)	hh		73 - 1/3			3429729/ 1:,,/	3429729/ 31,1/	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLez hu &	. 0g0698	2	0g0698	GKlBK	-		01KHOH6 0:14	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hosLehr <	. 49g	2	49g	GKlBK	-		04KHOH6 C:0l	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnoeEt RUEKt OjKUErl m (5 RO)-i P-i I 0	. 49g	2	49g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:H9	I
Drt nt eRUEKt OjKUErl m(Odt j i l 0-i HB)	. 49g	2	49g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:H9	I
OleRUEKt OjKUErl m(Odt j i HB-i 6P)	. 49g	2	49g	GKlBK	-	04KHOH6 6:48	04KHOH6 P:H9	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-c t l o r o o a b n e	117		73 - 1/3			3429729/ 1/,40	3429729/ 1+,9h	1
o-Terpt enyl	1//	S16	73 - 1/3			3429729/ 1/,40	3429729/ 1+,9h	1

uSjovEmi UjenbUf

Client Sample Results

i Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLjt aULt 2 Ems4H0<

3D5 : 06i | 118l 9P

Client Sample ID: SW28

Lab Sample ID: 890-4575-4

Date Collected: 04/25/23 12:00

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 0 - 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	180		1gH	GK&BK			01H0H6 4:l 1	I

Client Sample ID: FS43A

Lab Sample ID: 890-4575-5

Date Collected: 04/25/23 14:10

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
z t Et Et	. 0g0H00	2	0g0H00	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
ho&Et Et	. 0g0H00	2	0g0H00	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
usyX&t Et Et	. 0g0H00	2	0g0H00	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
G-&X& Et p , -&X& Et	. 0g040l	2	0g040l	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
o-&X& Et	. 0g0H00	2	0g0H00	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
&X& Et m7hos&e	. 0g040l	2	0g040l	GK&BK		04H0H6 1:66	04H0H6 0l :69	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	199		73 - 1/ 3			342729/ 1: ,/ /	3429h29/ 31: / h	1
12-i Fluorobenzene (Surr)	h/		73 - 1/ 3			342729/ 1: ,/ /	3429h29/ 31: / h	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hos&ez hu &	. 0g040l	2	0g040l	GK&BK			01H0l H6 0:H4	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hos&ehr <	. 49g	2	49g	GK&BK			04H0H6 C:0l	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 Un&Et RUEKt OjKUEnt m	. 49g	2	49g	GK&BK		04H0H6 6:48	04H0H6 P:1l	I
(5 RO)-i P-i l 0								
Drt nt eRUEKt OjKUEnt m(Odt j	. 49g	2	49g	GK&BK		04H0H6 6:48	04H0H6 P:1l	I
i l 0-i H8)								
OleRUEKt OjKUEnt m(Odt j i H8-i 6P)	. 49g	2	49g	GK&BK		04H0H6 6:48	04H0H6 P:1l	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-c t l o r o o a&ne	190		73 - 1/ 3			342729/ 1/ ,40	342729/ 1+: 1	1
o-Terpt enyl	14h	S16	73 - 1/ 3			342729/ 1/ ,40	342729/ 1+: 1	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	994		1gH	GK&BK			01H0H6 4:60	I

uSjovEmi Uj&buF

Client Sample Results

i Es uEnoSG
r jod / s3rd : r oLtj aUlT 2 Es4H0<

Job ID: 890-41C1-I
3D5 : 06i | 118l 9P

Client Sample ID: FS48A
Date Collected: 04/25/23 14:15
Date Received: 04/26/23 08:06
Sample Depth: 4

Lab Sample ID: 890-4575-6
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
z t Et Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
hoEt Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
usyXbt Et Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
G-&XEt p , -&XEt Et	. 0g0040H	2	0g0040H	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
o-&XEt Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
&XEt Et n7hosLe	. 0g0040H	2	0g0040H	GKlBK	-	04H-H6 1:66	04H-H6 06:H6		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	110		73 - 1/3			342729/ 1: ,//	342h29/ 3/,9/	1	
12-i fluorobenzene (Surr)	h9		73 - 1/3			342729/ 1: ,//	342h29/ 3/,9/	1	

Method: TAL SOP Total BTEX - Total BTEX Calculation									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
hosLez hu &	. 0g0040H	2	0g0040H	GKlBK	-		01Hl H6 0:H4		

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	228		49g	GKlBK	-		04H-H6 C:Ol		

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
5 UnoeEt RUEKt OjKUErl m (5 RO)-i P-i l O	. 49g	2	49g	GKlBK	-	04H-H6 6:48	04H-H6 Cl H		
Diesel Range Organics (Over C10-C28)	228		49g	GKlBK	-	04H-H6 6:48	04H-H6 Cl H		
OleRUEKt OjKUErl m(Odt j i HB-i 6P)	. 49g	2	49g	GKlBK	-	04H-H6 6:48	04H-H6 Cl H		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-c t lrooaane	19/		73 - 1/3			342729/ 1/,40	342729/ 17,19	1	
o-Terpt enyl	1: 9	S16	73 - 1/3			342729/ 1/,40	342729/ 17,19	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	751		4g8	GKlBK	-		01Hl H6 4:61		

Client Sample ID: FS49A
Date Collected: 04/25/23 14:20
Date Received: 04/26/23 08:06
Sample Depth: 4

Lab Sample ID: 890-4575-7
Matrix: Solid

Method: SW846 8021B - Volatile Organic Compounds (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
z t Et Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
hoEt Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
usyXbt Et Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
G-&XEt p , -&XEt Et	. 0g00404	2	0g00404	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
o-&XEt Et	. 0g00Hl	2	0g00Hl	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
&XEt Et n7hosLe	. 0g00404	2	0g00404	GKlBK	-	04H-H6 1:66	04H-H6 06:49		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	119		73 - 1/3			342729/ 1: ,//	342h29/ 3/,4h	1	

uSjovEmi UenbUf

Client Sample Results

i Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLtj aULt 2 En4H0<

3D5 : 06i | 118l 9P

Client Sample ID: FS49A

Lab Sample ID: 890-4575-7

Date Collected: 04/25/23 14:20

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene (Surr)	0+		73 - 1/3	342729/ 1: / /	3429h29/ 3/ ,4h	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hoshjez hu &	. 0g0404	2	0g0404	GKIBK			01K0I H-6 0:H4	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hoshjehr <	. 49g	2	49g	GKIBK			04K-BH-6 C:0I	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnnoEt RUEKt OjKUEnt m (5 RO)-i P-i I 0	. 49g	2	49g	GKIBK		04K-HH-6 6:48	04K-HH-6 C:64	I
Dit nt eRUEKt OjKUEnt m(Odt j i I 0-i HB)	. 49g	2	49g	GKIBK		04K-HH-6 6:48	04K-HH-6 C:64	I
OleRUEKt OjKUEnt m(Odt j i HB-i 6P)	. 49g	2	49g	GKIBK		04K-HH-6 6:48	04K-HH-6 C:64	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-c t l orooaone	141	S16	73 - 1/3			342729/ 1/ ,40	342729/ 17/ ,4	1
o-Terpt enyl	1+	S16	73 - 1/3			342729/ 1/ ,40	342729/ 17/ ,4	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	473		4g99	GKIBK			01K0H-H-6 4:40	I

Client Sample ID: FS50A

Lab Sample ID: 890-4575-8

Date Collected: 04/25/23 14:25

Matrix: Solid

Date Received: 04/26/23 08:06

Sample Depth: 4

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
zt Et Et	. 0g0I 99	2	0g0I 99	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
hosh Et	. 0g0I 99	2	0g0I 99	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
usyXbt Et Et	. 0g0I 99	2	0g0I 99	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
G-&Xt Et p , -&Xt Et	. 0g0698	2	0g0698	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
o-&Xt Et	. 0g0I 99	2	0g0I 99	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
&Xt Et n7hosh	. 0g0698	2	0g0698	GKIBK		04K-HH-6 1:66	04K-HH-6 04:I P	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	19h		73 - 1/ 3			342729/ 1: , / /	3429h29/ 34,1+	1
1,2,4-Fluorobenzene (Surr)	0:		73 - 1/ 3			342729/ 1: , / /	3429h29/ 34,1+	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hoshjez hu &	. 0g0698	2	0g0698	GKIBK			01K0I H-6 0:H4	I

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
hoshjehr <	. 49g	2	49g	GKIBK			04K-BH-6 C:0I	I

uSjovEmi UenbuF

Client Sample Results

i a Es uEnoSG
r jod / s3 r : r oLt j aULt 2 Ems4H0<

Job ID: 890-41C1-I
3D5 : 06i | 118l 9P

Client Sample ID: FS50A Lab Sample ID: 890-4575-8
Date Collected: 04/25/23 14:25 Matrix: Solid
Date Received: 04/26/23 08:06
Sample Depth: 4

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
5 UnnoEt RUEKt OjKUEr m (5 RO)-i P-i I 0	. 49g	2	49g	GKlBK		04HCH6 6:48	04HCH6 C:11	I	
Drt m eRUEKt OjKUEr m(Odt j i I 0-i HB)	. 49g	2	49g	GKlBK		04HCH6 6:48	04HCH6 C:11	I	
OleRUEKt OjKUEr m(Odt j i HB-i 6P)	. 49g	2	49g	GKlBK		04HCH6 6:48	04HCH6 C:11	I	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-c t l o r o o a d n e	11h		73 - 1/3			34272/ 1/ ,40	34272/ 17,: :	1	
o-Terpt enyl	14+	S16	73 - 1/3			34272/ 1/ ,40	34272/ 17,: :	1	
Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	356		1g4	GKlBK			01HCH6 4:44	I	

Surrogate Summary

Int Est uoinS
r jon/ EGD: r oLnj aULn 2t E4H0A

Job ID: 890-4313-C
GD5 : 06I C338C9P

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-H1P8H-M-C-D x G	x Uf p GFdn	CH	91
880-H1P8H-M-C-s x GD	x Uf p GFdn DnfFid Udn	CC3	98
890-4313-C	7GH6M	CC8	9C
890-4313-H	7GH6M	CH1	93
890-4313-6	GB H1	C63 GQW	98
890-4313-4	GB H8	C6P GQW	99
890-4313-3	7G46M	CH	96
890-4313-P	7G48M	CC8	9H
890-4313-1	7G49M	CH	8P
890-4313-8	7G30M	CH9	83
al G 880-3HC68K-M	aUb l ot fpoi GUS Fin	CO1	89
al GD 880-3HC68H-M	aUb l ot fpoi GUS Fin DnfF	CO0	CO6
x h 880-3HC68K-M	x nEdo= hiUt L	P3 GC-	8P
x h 880-3HC1H8	x nEdo= hiUt L	P4 GC-	83
Surrogate Legend			
h7h f 4-hjoSoznojont (nt n)GnjZ			
D7h, f C4-Dainojont (nt n)GnjZ			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
890-4313-C	7GH6M	CH9	C31 GQW
890-4313-C x G	7GH6M	CH	C6H GQW
890-4313-C x GD	7GH6M	CH0	CH1
890-4313-H	7GH6M	C43 GQW	CP6 GQW
890-4313-6	GB H1	CC1	C6P GQW
890-4313-4	GB H8	CC1	C66 GQW
890-4313-3	7G46M	CH8	C49 GQW
890-4313-P	7G48M	CH6	C3H GQW
890-4313-1	7G49M	C4C GQW	CP6 GQW
890-4313-8	7G30M	CC9	C4P GQW
al G 880-3HC68H-M	aUb l ot fpoi GUS Fin	C64 GQW	C3P GQW
al GD 880-3HC68K-M	aUb l ot fpoi GUS Fin DnfF	CH6	C41 GQW
x h 880-3HC68K-M	x nEdo= hiUt L	C10 GQW	H09 GQW
Surrogate Legend			
Q O f Cl diojoo/ Etn			
OTr A f o-TnjFdnt yi			

snjoz ul UjubU

QC Sample Results

i Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLtj aULt 2 Ems4H0<

3D5 : 06i | 118l 9P

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-52138/5-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 52138

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
. t Egt Et	K0B0H00	2	0B0H00	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l
hoEt Et	K0B0H00	2	0B0H00	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l
usyXbt Egt Et	K0B0H00	2	0B0H00	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l
G-&Xt Et p , -&Xt Et	K0B0400	2	0B0400	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l
o-&Xt Et	K0B0H00	2	0B0H00	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l
&Xt Et n7hosLe	K0B0400	2	0B0400	GzKfZ		04H0H6 1:66	04H0H6 H :l C	l

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	10	S7-	3/ - 72/	/ 49 39 2 70D22	/ 49 , 9 2 : 7D3	7
7i4-Chlorobenzene (Surr)	, 1		3/ - 72/	/ 49 39 2 70D22	/ 49 , 9 2 : 7D3	7

Lab Sample ID: LCS 880-52138/1-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 52138

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
. t Egt Et	0B 00	0B l H		GzKfZ		l l H	00 - l 60
hoEt Et	0B 00	0B l 49		GzKfZ		l l l	00 - l 60
usyXbt Egt Et	0B 00	0B 0H6		GzKfZ		l 0H	00 - l 60
G-&Xt Et p , -&Xt Et	0B 00	0B 09l		GzKfZ		l 0l	00 - l 60
o-&Xt Et	0B 00	0B 0HC		GzKfZ		l 06	00 - l 60

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	7/ 3		3/ - 72/
7i4-Chlorobenzene (Surr)	, c		3/ - 72/

Lab Sample ID: LCSD 880-52138/2-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 52138

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
. t Egt Et	0B 00	0B H46		GzKfZ		l H4	00 - l 60	l 0	61
hoEt Et	0B 00	0B l H		GzKfZ		l l H	00 - l 60	H	61
usyXbt Egt Et	0B 00	0B 01C		GzKfZ		l 0P	00 - l 60	6	61
G-&Xt Et p , -&Xt Et	0B 00	0B H 8C		GzKfZ		l 09	00 - l 60	4	61
o-&Xt Et	0B 00	0B 0C4		GzKfZ		l 0C	00 - l 60	4	61

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	77/		3/ - 72/
7i4-Chlorobenzene (Surr)	7/ 2		3/ - 72/

Lab Sample ID: 880-27682-A-1-D MS

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 52138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
. t Egt Et	K0B0H00	2	0B998	0B l CP		GzKfZ		l l 8	00 - l 60
hoEt Et	K0B0H00	2	0B998	0B l l 8		GzKfZ		l l H	00 - l 60

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QC Sample Results

i Es uEnoSG
r jod / s3rd : r oLtj aUl 2 Es4H0<

Job ID: 890-41C1-I
3D5 : 06i | 118l 9P

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

Lab Sample ID: 880-27682-A-1-D MS
Matrix: Solid
Analysis Batch: 52172

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 52138

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
u syXbt Egt Et	K000H00	2	000998	000988P		Gzktz		99	00 - 160
G-&Xt Et p , -&Xt Et	K000400l	2	000H00	000H0l 9		Gzktz		10l	00 - 160
o-&Xt Et	K000H00	2	000998	000H0D		Gzktz		10H	00 - 160
MS MS									
Surrogate	%Recovery	Qualifier	Limits						
4-Bromofluorobenzene (Surr)	7: :		3/ - 72/						
7i4-Chfluorobenzene (Surr)	c3		3/ - 72/						

Lab Sample ID: 880-27682-A-1-E MSD
Matrix: Solid
Analysis Batch: 52172

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 52138

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
. t Egt Et	K000H00	2	000990	000888C		Gzktz		90	00 - 160	H8	61
hoet Et	K000H00	2	000990	0008l 19		Gzktz		8H	00 - 160	6l	61
u syXbt Egt Et	K000H00	2	000990	00006HP		Gzktz		C4	00 - 160	60	61
G-&Xt Et p , -&Xt Et	K000400l	2	000B 98	000B 490		Gzktz		C1	00 - 160	60	61
o-&Xt Et	K000H00	2	000990	0000C 9		Gzktz		C8	00 - 160	H8	61
MSD MSD											
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	770		3/ - 72/								
7i4-Chfluorobenzene (Surr)	c,		3/ - 72/								

Lab Sample ID: MB 880-52172/8
Matrix: Solid
Analysis Batch: 52172

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

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
. t Egt Et	K000H00	2	000H00	Gzktz			04H0H6 1 1:1 4	l
hoet Et	K000H00	2	000H00	Gzktz			04H0H6 1 1:1 4	l
u syXbt Egt Et	K000H00	2	000H00	Gzktz			04H0H6 1 1:1 4	l
G-&Xt Et p , -&Xt Et	K000400	2	000400	Gzktz			04H0H6 1 1:1 4	l
o-&Xt Et	K000H00	2	000H00	Gzktz			04H0H6 1 1:1 4	l
&Xt Et m7hosLb	K000400	2	000400	Gzktz			04H0H6 1 1:1 4	l
MB MB								
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	14	S7-	3/ - 72/				/ 49 , 9 2 70D4	7
7i4-Chfluorobenzene (Surr)	, 0		3/ - 72/				/ 49 , 9 2 70D4	7

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

Lab Sample ID: MB 880-52128/1-A
Matrix: Solid
Analysis Batch: 52071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 52128

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
5 UnoeEt (UeZt) jzUEm m	K100	2	100	Gzktz		04H0H6 08:00	04H0H6 09:4H	l
v5 () f-i P-i l 0								

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QC Sample Results

i Es uEnoSG

Job ID: 890-41C1-I

r jod / s3rd : r oLt j aULt 2 Ems4H0<

3D5 : 06i I 118l 9P

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

Lab Sample ID: MB 880-52128/1-A

Client Sample ID: Method Blank

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 52071

Prep Batch: 52128

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Dit mt e(UEzt) jzUErl mv) dt j i I 0-i HBf	K10B	2	10B	GzktZ		04HCH6 08:00	04HCH6 09:4H	I
) le(UEzt) jzUErl mv) dt j i HB-i 6Pf	K10B	2	10B	GzktZ		04HCH6 08:00	04HCH6 09:4H	I
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
7-t aloroo85Tne	73/	S7p	3/ - 72/			/ 49 39 2 / , D/	/ 49 39 2 / cD:	7
o-yer6aen+l	: / c	S7p	3/ - 72/			/ 49 39 2 / , D/	/ 49 39 2 / cD:	7

Lab Sample ID: LCS 880-52128/2-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 52071

Prep Batch: 52128

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits	
5 UnoeEt (UEzt) jzUErl m	I 000	I 004		GzktZ		I 00	00 - I 60	
v5 () f-i P-i I 0								
Dit mt e(UEzt) jzUErl mv) dt j i I 0-i HBf	I 000	I I 0P		GzktZ		I I I	00 - I 60	
Surrogate	%Recovery	Qualifier	Limits					
7-t aloroo85Tne	724	S7p	3/ - 72/					
o-yer6aen+l	701	S7p	3/ - 72/					

Lab Sample ID: LCSD 880-52128/3-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 52071

Prep Batch: 52128

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
5 UnoeEt (UEzt) jzUErl m	I 000	9P8BH		GzktZ		9C	00 - I 60	4	H0
v5 () f-i P-i I 0									
Dit mt e(UEzt) jzUErl mv) dt j i I 0-i HBf	I 000	I 06P		GzktZ		I 04	00 - I 60	C	H0
Surrogate	%Recovery	Qualifier	Limits						
7-t aloroo85Tne	7: 2		3/ - 72/						
o-yer6aen+l	743	S7p	3/ - 72/						

Lab Sample ID: 890-4575-1 MS

Client Sample ID: FS23A

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 52071

Prep Batch: 52128

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits	
5 UnoeEt (UEzt) jzUErl m	K10B	2	998	981B		GzktZ		94	00 - I 60	
v5 () f-i P-i I 0										
Dit mt e(UEzt) jzUErl mv) dt j i I 0-i HBf	91BH		998	I I 41		GzktZ		I 01	00 - I 60	
Surrogate	%Recovery	Qualifier	Limits							
7-t aloroo85Tne	7: :		3/ - 72/							
o-yer6aen+l	72: S7p		3/ - 72/							

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QC Sample Results

i el Es uEmoSG
 r jod / s3rt : r oLt j aULt 2 Es4H0<

Job ID: 890-41C1-I
3D5 : 06i | 118| 9P

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

Lab Sample ID: 890-4575-1 MSD
Matrix: Solid
Analysis Batch: 52071

Client Sample ID: FS23A
Prep Type: Total/NA
Prep Batch: 52128

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limits
5-Undec (UEzt) jzUEtlm v5 () f-i P-i l 0	K10B	2	99C	999C		GzktZ		9P	00 - l 60	l	H0
Dit nt e(UEzt) jzUEtlmv) dt j i l 0-i HBf	91BH		99C	l l l P		GzktZ		l 0H	00 - l 60	6	H0
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
7-t aloroo85ne	7: /		3/ - 72/								
o-ver6aen+)	7: 3		3/ - 72/								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-52209/1-A
Matrix: Solid
Analysis Batch: 52404

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB	MB	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
iron	100	2	100	GzKz	-		0101161166	1

Lab Sample ID: LCS 880-52209/2-A
Matrix: Solid
Analysis Batch: 52404

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
iodine	110	111	110	G/L	-	101	90 - 110

Lab Sample ID: LCSD 880-52209/3-A
Matrix: Solid
Analysis Batch: 52404

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

Analyte	Spike	LCS	LCS	Unit	D	%Rec	%Rec	RPD	RPD
	Added	Result	Qualifier				Limits		Limits
iodine	110	110	9	Gzktz	-	100	90-110	0	110

Lab Sample ID: 890-4575-2 MS
Matrix: Solid
Analysis Batch: 52404

Client Sample ID: FS22A
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
i yojrQ	l 66		Hll	6P8B		GzKz		94	90 - 110

Lab Sample ID: 890-4575-2 MSD
Matrix: Solid
Analysis Batch: 52404

Client Sample ID: FS22A
Prep Type: Soluble

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec	RPD	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		Limits
1000	166		111	6000		GZKTZ		91	90-110	0	100

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QC Association Summary

i a Es uEnoSG
r jod / s3rd : r oLtj aULt 2 Ems4H0d

Job ID: 890-41C1-I
3D5 : 06i | 118l 9P

GC VOA

Prep Batch: 52138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJbMN	3oeF	1061	
890-41C1-H	T3HNN	AosJbMN	3oeF	1061	
890-41C1-6	3B HC	AosJbMN	3oeF	1061	
890-41C1-4	3B HB	AosJbMN	3oeF	1061	
890-41C1-1	T346N	AosJbMN	3oeF	1061	
890-41C1-P	T348N	AosJbMN	3oeF	1061	
890-41C1-C	T349N	AosJbMN	3oeF	1061	
890-41C1-8	T310N	AosJbMN	3oeF	1061	
h p 880-1H 68K1-N	h t s7oF p dJEL	AosJbMN	3oeF	1061	
ai 3 880-1H 68K -N	aUb i oEjoe3UGx d	AosJbMN	3oeF	1061	
ai 3D 880-1H 68K+N	aUb i oEjoe3UGx d DSx	AosJbMN	3oeF	1061	
880-HCP8H-N-I -D h 3	h Uj rX3 xrlt	AosJbMN	3oeF	1061	
880-HCP8H-N-I -u h 3D	h Uj rX3 xrlt DSx d Ust	AosJbMN	3oeF	1061	

Analysis Batch: 52172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJbMN	3oeF	80H p	1H 68
890-41C1-H	T3HNN	AosJbMN	3oeF	80H p	1H 68
890-41C1-6	3B HC	AosJbMN	3oeF	80H p	1H 68
890-41C1-4	3B HB	AosJbMN	3oeF	80H p	1H 68
890-41C1-1	T346N	AosJbMN	3oeF	80H p	1H 68
890-41C1-P	T348N	AosJbMN	3oeF	80H p	1H 68
890-41C1-C	T349N	AosJbMN	3oeF	80H p	1H 68
890-41C1-8	T310N	AosJbMN	3oeF	80H p	1H 68
h p 880-1H 68K1-N	h t s7oF p dJEL	AosJbMN	3oeF	80H p	1H 68
h p 880-1H CH8	h t s7oF p dJEL	AosJbMN	3oeF	80H p	
ai 3 880-1H 68K -N	aUb i oEjoe3UGx d	AosJbMN	3oeF	80H p	1H 68
ai 3D 880-1H 68K+N	aUb i oEjoe3UGx d DSx	AosJbMN	3oeF	80H p	1H 68
880-HCP8H-N-I -D h 3	h Uj rX3 xrlt	AosJbMN	3oeF	80H p	1H 68
880-HCP8H-N-I -u h 3D	h Uj rX3 xrlt DSx d Ust	AosJbMN	3oeF	80H p	1H 68

Analysis Batch: 52277

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJbMN	3oeF	AosJep Au W	
890-41C1-H	T3HNN	AosJbMN	3oeF	AosJep Au W	
890-41C1-6	3B HC	AosJbMN	3oeF	AosJep Au W	
890-41C1-4	3B HB	AosJbMN	3oeF	AosJep Au W	
890-41C1-1	T346N	AosJbMN	3oeF	AosJep Au W	
890-41C1-P	T348N	AosJbMN	3oeF	AosJep Au W	
890-41C1-C	T349N	AosJbMN	3oeF	AosJep Au W	
890-41C1-8	T310N	AosJbMN	3oeF	AosJep Au W	

GC Semi VOA

Analysis Batch: 52071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJbMN	3oeF	80l 1p Mh	1H HB
890-41C1-H	T3HNN	AosJbMN	3oeF	80l 1p Mh	1H HB
890-41C1-6	3B HC	AosJbMN	3oeF	80l 1p Mh	1H HB
890-41C1-4	3B HB	AosJbMN	3oeF	80l 1p Mh	1H HB
890-41C1-1	T346N	AosJbMN	3oeF	80l 1p Mh	1H HB

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QC Association Summary

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Job ID: 890-41C1-I

r jod / s3 r : r oL t j aULt 2 E s4H0d

3D5 : 06i | 118l 9P

GC Semi VOA (Continued)

Analysis Batch: 52071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-P	T348N	AosJMN	3oeF	80l 1p Mh	1H HB
890-41C1-C	T349N	AosJMN	3oeF	80l 1p Mh	1H HB
890-41C1-8	T310N	AosJMN	3oeF	80l 1p Mh	1H HB
h p 880-1H H8K -N	h t s7oF p dJEL	AosJMN	3oeF	80l 1p Mh	1H HB
ai 3 880-1H H8K+N	aUb i oEsjoe3UGx d	AosJMN	3oeF	80l 1p Mh	1H HB
ai 3D 880-1H H8K6-N	aUb i oEsjoe3UGx d DSx	AosJMN	3oeF	80l 1p Mh	1H HB
890-41C1-I h 3	T3H6N	AosJMN	3oeF	80l 1p Mh	1H HB
890-41C1-I h 3D	T3H6N	AosJMN	3oeF	80l 1p Mh	1H HB

Prep Batch: 52128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-H	T3H+N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-6	3B HC	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-4	3B H8	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-1	T346N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-P	T348N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-C	T349N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-8	T310N	AosJMN	3oeF	80l 1Mh r jtx	
h p 880-1H H8K -N	h t s7oF p dJEL	AosJMN	3oeF	80l 1Mh r jtx	
ai 3 880-1H H8K+N	aUb i oEsjoe3UGx d	AosJMN	3oeF	80l 1Mh r jtx	
ai 3D 880-1H H8K6-N	aUb i oEsjoe3UGx d DSx	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-I h 3	T3H6N	AosJMN	3oeF	80l 1Mh r jtx	
890-41C1-I h 3D	T3H6N	AosJMN	3oeF	80l 1Mh r jtx	

Analysis Batch: 52235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	AosJMN	3oeF	80l 1 Mh	
890-41C1-H	T3H+N	AosJMN	3oeF	80l 1 Mh	
890-41C1-6	3B HC	AosJMN	3oeF	80l 1 Mh	
890-41C1-4	3B H8	AosJMN	3oeF	80l 1 Mh	
890-41C1-1	T346N	AosJMN	3oeF	80l 1 Mh	
890-41C1-P	T348N	AosJMN	3oeF	80l 1 Mh	
890-41C1-C	T349N	AosJMN	3oeF	80l 1 Mh	
890-41C1-8	T310N	AosJMN	3oeF	80l 1 Mh	

HPLC/IC

Leach Batch: 52209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	3oeSb d	3oeF	DI at U 7	
890-41C1-H	T3H+N	3oeSb d	3oeF	DI at U 7	
890-41C1-6	3B HC	3oeSb d	3oeF	DI at U 7	
890-41C1-4	3B H8	3oeSb d	3oeF	DI at U 7	
890-41C1-1	T346N	3oeSb d	3oeF	DI at U 7	
890-41C1-P	T348N	3oeSb d	3oeF	DI at U 7	
890-41C1-C	T349N	3oeSb d	3oeF	DI at U 7	
890-41C1-8	T310N	3oeSb d	3oeF	DI at U 7	
h p 880-1H H09K -N	h t s7oF p dJEL	3oeSb d	3oeF	DI at U 7	
ai 3 880-1H H09K+N	aUb i oEsjoe3UGx d	3oeSb d	3oeF	DI at U 7	
ai 3D 880-1H H09K6-N	aUb i oEsjoe3UGx d DSx	3oeSb d	3oeF	DI at U 7	

uSjofrEmi UjnbUF

QC Association Summary

i 8 Es uEnoSG

Job ID: 890-41C1-I

r jod / s3 r : r oLt j aULt 2 Es4H0d

3D5 : 06i I 118l 9P

HPLC/IC (Continued)

Leach Batch: 52209 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-Hh 3	T3HHN	3oεbε	3oεF	DI at U 7	
890-41C1-Hh 3D	T3HHN	3oεbε	3oεF	DI at U 7	

Analysis Batch: 52404

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-41C1-I	T3H6N	3oεbε	3oεF	600.0	1H+09
890-41C1-H	T3HHN	3oεbε	3oεF	600.0	1H+09
890-41C1-6	3B HC	3oεbε	3oεF	600.0	1H+09
890-41C1-4	3B H8	3oεbε	3oεF	600.0	1H+09
890-41C1-1	T346N	3oεbε	3oεF	600.0	1H+09
890-41C1-P	T348N	3oεbε	3oεF	600.0	1H+09
890-41C1-C	T349N	3oεbε	3oεF	600.0	1H+09
890-41C1-8	T310N	3oεbε	3oεF	600.0	1H+09
h p 880-1HH09K -N	h t s'of p εEL	3oεbε	3oεF	600.0	1H+09
ai 3 880-1HH09K+N	aUb i oEsjoe3UGxε	3oεbε	3oεF	600.0	1H+09
ai 3D 880-1HH09K6-N	aUb i oEsjoe3UGxε DSx	3oεbε	3oεF	600.0	1H+09
890-41C1-Hh 3	T3HHN	3oεbε	3oεF	600.0	1H+09
890-41C1-Hh 3D	T3HHN	3oεbε	3oεF	600.0	1H+09

uSjofrEmi UjεbUF

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 4H0G

Job ID: 890-4323-1
SD5 : 06C133819p

Client Sample ID: FS05A

Lab Sample ID: 89- 431M4x

Date Collecte2: - 3R1R5 - 9: - -

d atri/ : Soli2

Date v ecei6e2: - 3RTR5 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	vzn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s repare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			3gHy	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80HIX		1	3 mL	3 mL	3H12H	04/H8/H6 H6:34	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H22	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H63	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10g0 y	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 14:46	SN	EEA NID
Soluble	Leach	DI Leach			3g1 y	30 mL	3H09	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 16:31	SNC	EEA NID

Client Sample ID: FS00A

Lab Sample ID: 89- 431M40

Date Collecte2: - 3R1R5 xx:01

d atri/ : Soli2

Date v ecei6e2: - 3RTR5 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	vzn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s repare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			3gHy	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80HIX		1	3 mL	3 mL	3H12H	04/H9/H6 00:H0	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H22	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H63	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10gHy	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 13:42	SN	EEA NID
Soluble	Leach	DI Leach			4g8 y	30 mL	3H09	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 16:3p	SNC	EEA NID

Client Sample ID: S7 0M

Lab Sample ID: 89- 431M45

Date Collecte2: - 3R1R5 xx:5-

d atri/ : Soli2

Date v ecei6e2: - 3RTR5 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	vzn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s repare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			3g6 y	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80HIX		1	3 mL	3 mL	3H12H	04/H9/H6 00:42	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H22	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H63	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10g1 y	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 1p:08	SN	EEA NID
Soluble	Leach	DI Leach			3g1 y	30 mL	3H09	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 14:11	SNC	EEA NID

Client Sample ID: S7 08

Lab Sample ID: 89- 431M43

Date Collecte2: - 3R1R5 x0:- -

d atri/ : Soli2

Date v ecei6e2: - 3RTR5 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	vzn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s repare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			3gHy	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80HIX		1	3 mL	3 mL	3H12H	04/H9/H6 01:16	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H22	03/01/H6 10:H4	SN	EEA NID

Euroins Carlsbaf

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 4H0G

Job ID: 890-4323-1
SD5 : 06C133819p

Client Sample ID: S7 08

Lab Sample ID: 89- 431M43

Date Collecte2: - 3/10/25 x0:- -

d atri/ : Soli2

Date v ecei6e2: - 3/10/25 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v zn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	. nalBsis	8013 RN		1			3H163	04/H2/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10gHy	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 1p:H9	SN	EEA NID
Soluble	Leach	DI Leach			4g8 y	30 mL	3H009	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 14:13	SNC	EEA NID

Client Sample ID: FS35A

Lab Sample ID: 89- 431M41

Date Collecte2: - 3/10/25 x3:x-

d atri/ : Soli2

Date v ecei6e2: - 3/10/25 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v zn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			4g9 y	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80H1X		1	3 mL	3 mL	3H12H	04/H9/H6 01:69	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H022	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H163	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10g3 y	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 1p:31	SN	EEA NID
Soluble	Leach	DI Leach			4g8 y	30 mL	3H009	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 14:60	SNC	EEA NID

Client Sample ID: FS38A

Lab Sample ID: 89- 431M47

Date Collecte2: - 3/10/25 x3:x1

d atri/ : Soli2

Date v ecei6e2: - 3/10/25 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v zn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			4g2 y	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80H1X		1	3 mL	3 mL	3H12H	04/H9/H6 06:H6	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H022	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H163	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10gHy	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 12:1H	SN	EEA NID
Soluble	Leach	DI Leach			3gHy	30 mL	3H009	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	600g		1	30 mL	30 mL	3H404	03/0H/H6 14:63	SNC	EEA NID

Client Sample ID: FS39A

Lab Sample ID: 89- 431M4M

Date Collecte2: - 3/10/25 x3:0-

d atri/ : Soli2

Date v ecei6e2: - 3/10/25 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v zn	Dil Factor	Initial Amoznt	Final Amoznt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			4g3 y	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80H1X		1	3 mL	3 mL	3H12H	04/H9/H6 06:49	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H022	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H163	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			10g4 y	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 12:64	SN	EEA NID

Euroins Carlsbaf

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 4H0G

Job ID: 890-4323-1
SD5 : 06C133819p

Client Sample ID: FS39A

Lab Sample ID: 89-431M4M

Date Collecte2: - 3R01R05 x3:0-

d atri/ : Soli2

Date v ecei6e2: - 3R0TR05 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v z n	Dil Factor	Initial Amoz nt	Final Amoz nt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Soluble	Leach	DI Leach			301 y	30 mL	3H09	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	6000		1	30 mL	30 mL	3H04	03/0H/H6 14:40	SNC	EEA NID

Client Sample ID: FS1- A

Lab Sample ID: 89-431M4B

Date Collecte2: - 3R01R05 x3:01

d atri/ : Soli2

Date v ecei6e2: - 3R0TR05 - 8:- T

s rep yBpe	Patch yBpe	Patch d etho2	v z n	Dil Factor	Initial Amoz nt	Final Amoz nt	Patch Wz mber	s reprepare2 or AnalBNe2	AnalBut	Lab
Aotal/R.	PreM	3063			30Hy	3 mL	3H168	04/H2/H6 13:66	NRT	EEA NID
Aotal/R.	. nalBsis	80H1X		1	3 mL	3 mL	3H12H	04/H8/H6 04:1p	NRT	EEA NID
Aotal/R.	. nalBsis	Aotal XAE7		1			3H22	03/01/H6 10:H4	SN	EEA NID
Aotal/R.	. nalBsis	8013 RN		1			3H63	04/H8/H6 12:01	SN	EEA NID
Aotal/R.	PreM	8013RN PreM			100Hy	10 mL	3H1H8	04/H2/H6 16:48	. J	EEA NID
Aotal/R.	. nalBsis	8013X RN		1	1 uL	1 uL	3H021	04/H2/H6 12:33	SN	EEA NID
Soluble	Leach	DI Leach			40p y	30 mL	3H09	04/H8/H6 11:H8	KS	EEA NID
Soluble	. nalBsis	6000		1	30 mL	30 mL	3H04	03/0H/H6 14:44	SNC	EEA NID

LaboratorB v eferenceu:
EEA NID d Euro=ns Nif lanf , 1H11 WgFlorif a . ve, Nif lanf , A7 29201, AEL (46H)204-3440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 4H0G

Job ID: 890-4323-1
SD5 : 06C133819h

Laboratory: Eurofins Midland

Unless otherwise noted, all analyses for this laboratory were completed under the accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Nebraska	AEL7P	104204400-HH3	06-30-23
The following analyses are included in this report, but the laboratory is not certified by the governing authority. This list may include analyses for which the agency does not have certification.			
7 half size Metw,	Prep Metw,	MatrIN	7 half size
8013 AM		Soli,	total xPG
total BxEX		Soli,	total BxEX

Method Summary

Client: Ensolum
Project/Site: Poker Lake Unit 4H0W

Job ID: 890-4323-1
SDG: 05C1338196

Method	Method Description	Protocol	Laboratory
80H1V	Volatile organic Compounds (s) GCT	SB 846	EEMA ID
Metal VMEN	Metal VMEN Calculation	MKL Sg P	EEMA ID
8013 RA	Diesel Exhaust Gas (DEG) GCT	SB 846	EEMA ID
8013V RA	Diesel Exhaust Gas (DEG) GCT	SB 846	EEMA ID
500,0	Nonionizable Cyromatopradex	EPX	EEMA ID
3053	Close System Purge and Measure	SB 846	EEMA ID
8013RA Pred	Air extraction	SB 846	EEMA ID
DI Leach	Deionized Water Leaching Procedure	XSMA	EEMA ID

Protocol References:

- XSMA v XSMA International
- EPX v US Environmental Protection Agency
- SB 846 v West Analytical Services (WAS) Physical/Chemical Analysis Method (Revision 1986) and its Updates
- MKL Sg P v West Analytical Services (WAS) Sampling Procedure

Laboratory References:

- EEMA ID v Eurofins Air (h) B, for Air (h) M20201hMEL)45H204-3440

Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4575-1
SDG: 03C1558196

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4575-1	FS23A	Solid	04/25/23 09:00	04/26/23 08:06	4
890-4575-2	FS22A	Solid	04/25/23 11:25	04/26/23 08:06	4
890-4575-3	SW27	Solid	04/25/23 11:30	04/26/23 08:06	0 - 3
890-4575-4	SW28	Solid	04/25/23 12:00	04/26/23 08:06	0 - 3
890-4575-5	FS43A	Solid	04/25/23 14:10	04/26/23 08:06	4
890-4575-6	FS48A	Solid	04/25/23 14:15	04/26/23 08:06	4
890-4575-7	FS49A	Solid	04/25/23 14:20	04/26/23 08:06	4
890-4575-8	FS50A	Solid	04/25/23 14:25	04/26/23 08:06	4



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) 794-1286
Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Order No: _____

www.xenco.com Page _____ of _____

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

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

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pers. Code	
Project Number:	03C1558196	Due Date:			
Project Location:		TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:	Connor Whitman				
PO #:					
SAMPLE RECEIPT	Temp Blank: ☒ Yes ☐ No	Thermometer ID:	☒ Yes ☐ No		
Samples Received In tact:	☒ Yes ☐ No	Correction Factor:			
Cooler Custody Seals:	☒ Yes ☐ No	Temperature Reading:			
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:			
Total Containers:		Corrected Temperature:			



890-4575 Chain of Custody

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	CHLORIDES (EPA: 3000.0)	TPH (8015)	BTEX (8021)	ANALYSIS REQUEST	Preservative Codes	Sample Comments	
FS223A	S	4/25/23	9:00	4'	C	1					None: NO	DI Water: H ₂ O	Incident ID: MAB1834656162
FS22A			11:25	4'	C	1					Cool: Cool	MeOH: Me	Cost Center: 1139851001
SV227			11:30	0-3'	C	1					HCL: HC	HNO ₃ : HN	AFF: PA 2022 04878 EXP 01
SV228			12:00	0-3'	C	1					H ₂ SO ₄ : H ₂	NaOH: Na	
FS43A			2:10	4'	C	1					H ₃ PO ₄ : HP		
FS48A			2:15	4'	C	1					NaHSO ₄ : NABIS		
FS49A			2:20	4'	C	1					Na ₂ S ₂ O ₃ : NaSO ₃		
FS50A			2:25	4'	C	1					Zn Acetate+NaOH: Zn		
											NaOH+Ascorbic Acid: S APC		

Total 200.7 / 6010 200.8 / 6020:		8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn			
Circle Method(s) and Metal(s) to be analyzed		TCCLP / 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
1 CTH	4/26/23 07:10	2 JMV			
3	4/26/23 07:10				
5					

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4575-1

SDG Number: 03C1558196

Login Number: 4575

List Number: 1

Creator: Clifton, Cloe

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4575-1

SDG Number: 03C1558196

Login Number: 4575

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/27/23 10:42 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 5/3/2023 10:48:15 AM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

890-4582-1

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
5/3/2023 10:48:15 AM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 890-4582-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Qualifiers

GC VOA

Qualifier	Qualifier Description
S1-	Surrogate recovery control limits. bias
S1w	Surrogate recovery control limits. bias
U	Indicates the analyte is analyzed for but not detected

GC Semi VOA

Qualifier	Qualifier Description
+	LCS any/or LCS is outside acceptance limits. bias
, 1	g S any/or g SD recovery control limits
S1-	Surrogate recovery control limits. bias
U	Indicates the analyte is analyzed for but not detected

HPLC/IC

Qualifier	Qualifier Description
U	Indicates the analyte is analyzed for but not detected

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	List the "D" column to yes if the result is reported on a yd. eif basis
%R	Percent Recovery
C, L	Contains, ree Liqui
C, U	Colony, orminF Unit
CN,	Contains No, ree Liqui
DER	Duplicate Error Ratio (normal if absolute difference)
Dil, ac	Dilution, actor
DL	Detection Limit (DoD/DOE)
DLxRaxRExIN	Indicates a Dilution/Re-analysis/Re-extraction or additional Initial metals/anion analysis of the sample
DLC	Decision Limit Concentration (Rayiochemistrd)
EDL	Estimate Detection Limit (Diovin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
g CL	EPA recommended "g avimum Contaminant Limit"
g DA	g inimum Detectable ActiMid (Rayiochemistrd)
g DC	g inimum Detectable Concentration (Rayiochemistrd)
g DL	g etzoy Detection Limit
g L	g inimum Limit (Diovin)
g PN	g ost Probable Number
g QL	g etzoy Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or g DL or EDL if szo. n)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Rayiochemistrd)
RL	Reporting Limit or Requested Limit (Rayiochemistrd)
RPD	Relative Percent Difference a measure of the relative difference between two points
TE,	Toxicity Equivalent, actor (Diovin)
TEQ	Toxicity Equivalent Quotient (Diovin)
TNTC	Too Numerous To Count

Case Narrative

Client: Ensolum
Project/Site: Poker Lake Unit 4702

Job ID: 890-4587-1
SDH: 00C1558193

Job ID: 890-4582-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4582-1

Receipt

6Te samhles pere receivev on 4/73/707G7:14 Pd A Unless otTerp ise notev belop MTe samhles arriev in . oov convitionManvMp Tere re, uirevMroherlg hreservev anv on iceA 6Te temherature oqtTe cooler at receiht time pas 1AByC

Receipt Exceptions

6Te plop in. samhles pere receivev anv analgf ev qom an unhreservev bulk soil jar: S° 79 z890-4587-1RM (S43) z890-4587-7RM (S51 z890-4587-7RM (S57 z890-4587-4RM (S5Gz890-4587-5RMS° G1 z890-4587-3RMS° G3 z890-4587-VF anv S° G7 z890-4587-8FA

GC VOA

d etTov 8071B: Surro. ate recoverg qpr tTe plop in. samhles pere outsize control limits: S° G7 z890-4587-8F anv z880-57198/5-) FA Ewivence oqmatrix interqprence is hresent; tTereporeMe-extraction anv/or re-analgsis pas not herqprmevA

d etTov 8071B: 6Te surro. ate recoverg qpr tTe blank associatev pitT hreharation batcT 880-571G8 anv analgtical batcT 880-571W7 pas outsize tTe uhher control limitsA

d etTov 8071B: 6Te continuin. calibration veriqcation zCCVFassociatev pitT batcT 880-571W7 recoverv above tTe uhher control limit qpr Benf ene anv 6olueneA 6Te samhles associatev pitT tTis CCV pere non-vetects qpr tTe aqpectev analges; tTereporeMTe vata Tawe been rehortevA 6Te associatev samhle is imhactev: zCCV 880-571W7/G4FA

d etTov 8071B: 6Te continuin. calibration veriqcation zCCVFassociatev pitT batcT 880-571W7 recoverv above tTe uhher control limit qpr Benf eneMolueneMEtTglbenf eneMn-Xglene & h-XgleneMb-Xglene anv XglenesMotalA 6Te samhles associatev pitT tTis CCV pere non-vetects qpr tTe aqpectev analges; tTereporeMTe vata Tawe been rehortevA 6Te associatev samhle is imhactev: zCCV 880-571W7/4VFA

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GC Semi VOA

d etTov 8015d OD_Nd : 6Te matrix shike / matrix shike vuhlicate z880-57181 anv analgtical batcT 880-57159 pere outsize control limits qpr one or more analgesMee RC Samhle Qesults qpr vetailASamhle matrix interqprence anv/or non-Tomo. eneigt are sushectev because tTe associatev laboratorg control samhle zLCSFrecoverg is pitTin accehtance limitsA

d etTov 8015d OD_Nd : Surro. ate recoverg qpr tTe plop in. samhles pere outsize control limits: S° 79 z890-4587-1RM (S43) z890-4587-7RM (S51 z890-4587-7RM (S57 z890-4587-4RM (S5Gz890-4587-5RMS° G1 z890-4587-3RMS° G3 z890-4587-VFMS° G7 z890-4587-8RM zLCS 880-57181/7-) RMzLCS 880-57181/G-) RMzB 880-57181/1-) RMz880-7VW10-) -1-(RMz880-7VW10-) -1-H d SF anv z880-7VW10-) -1-2 d SFA Ewivence oqmatrix interqprences is not obviousA

d etTov 8015d OD_Nd : Surro. ate recoverg qpr tTe plop in. samhles pere outsize control limits: zCCV 880-57159/70RMzCCV 880-57159/G1RMzCCV 880-57159/4VFA anv zCCV 880-57159/5FA Ewivence oqmatrix interqprences is not obviousA

No avvitinal analgtical or , uality issues pere notevMtTer tTan tTose vescribev above or in tTe Deqnitions/ Hlossarg ha. eA

HPLC/IC

No avvitinal analgtical or , uality issues pere notevMtTer tTan tTose vescribev above or in tTe Deqnitions/ Hlossarg ha. eA

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: SW29

Lab Sample ID: 890-4582-1

Date Collected: 04/26/23 09:40

Matrix: Solid

Date Received: 04/26/23 14:14

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		04/28/23 10:19	04/29/23 11:20	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 11:20	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 11:20	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/28/23 10:19	04/29/23 11:20	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 11:20	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/28/23 10:19	04/29/23 11:20	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	04/29/23 10:1	04/2, /23 11:20	1
1,2-Dichlorobenzene (Surr)	99		70 - 130	04/29/23 10:1	04/2, /23 11:20	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			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 17:14	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 17:14	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/28/23 09:48	04/28/23 17:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-h chloroot 3ne	79		70 - 130	04/29/23 0, :49	04/29/23 17:14	1
o-5erTcenpl	y0	S1-	70 - 130	04/29/23 0, :49	04/29/23 17:14	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369		5.04	mg/Kg			05/02/23 14:02	1

Client Sample ID: FS46A

Lab Sample ID: 890-4582-2

Date Collected: 04/26/23 09:50

Matrix: Solid

Date Received: 04/26/23 14:14

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		04/28/23 10:19	04/29/23 11:47	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 11:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 11:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 11:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 11:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 11:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130	04/29/23 10:1	04/2, /23 11:47	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: FS46A

Lab Sample ID: 890-4582-2

Date Collected: 04/26/23 09:50

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene (Surr)	92		70 - 130	04/29/23 10:1	04/2, /23 11:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:36	1
Diesel Range Organics (Over C10-C28)	<49.8	U *	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:36	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:36	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-h chloroot aBne	7y		70 - 130			04/29/23 0, :49	04/29/23 17:3y	1
o-5erTcenpl	6, S1-		70 - 130			04/29/23 0, :49	04/29/23 17:3y	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	274		5.01	mg/Kg			05/02/23 14:07	1

Client Sample ID: FS51

Lab Sample ID: 890-4582-3

Date Collected: 04/26/23 10:30

Matrix: Solid

Date Received: 04/26/23 14:14

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		04/28/23 10:19	04/29/23 12:14	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 12:14	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 12:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 12:14	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 12:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 12:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	117		70 - 130	04/29/23 10:1	04/2, /23 12:14	1
1,4-Dichlorobenzene (Surr)	, 1		70 - 130	04/29/23 10:1	04/2, /23 12:14	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			04/30/23 14:19	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: FS51

Lab Sample ID: 890-4582-3

Date Collected: 04/26/23 10:30

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *-	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:57	1
Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:57	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/28/23 09:48	04/28/23 17:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-h cloroot dne	72		70 - 130			04/29/23 0, :49	04/29/23 17:67	1
o-5erTcenpl	6y	S1-	70 - 130			04/29/23 0, :49	04/29/23 17:67	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	956		4.99	mg/Kg			05/02/23 14:23	1

Client Sample ID: FS52

Lab Sample ID: 890-4582-4

Date Collected: 04/26/23 10:35

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		04/28/23 10:19	04/29/23 12:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	116		70 - 130			04/29/23 10:1,	04/2, /23 12:41	1
1,4-di Fluorobenzene (Surr)	99		70 - 130			04/29/23 10:1,	04/2, /23 12:41	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			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0	mg/Kg		04/28/23 09:48	04/28/23 18:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0	mg/Kg		04/28/23 09:48	04/28/23 18:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/28/23 09:48	04/28/23 18:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-h cloroot dne	77		70 - 130			04/29/23 0, :49	04/29/23 19:19	1
o-5erTcenpl	y0	S1-	70 - 130			04/29/23 0, :49	04/29/23 19:19	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: FS52

Lab Sample ID: 890-4582-4

Date Collected: 04/26/23 10:35

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 4'

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	532		4.96	mg/Kg			05/02/23 14:28	1

Client Sample ID: FS53

Lab Sample ID: 890-4582-5

Date Collected: 04/26/23 10:40

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/28/23 10:19	04/29/23 13:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	11y		70 - 130			04/29/23 10:1,	04/2, /23 13:0,	1
1,2-Dichlorobenzene (Surr)	, 2		70 - 130			04/29/23 10:1,	04/2, /23 13:0,	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			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 18:40	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 18:40	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/28/23 09:48	04/28/23 18:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-h chloroot 8ne	71		70 - 130			04/29/23 0, :49	04/29/23 19:40	1
o-5erTcenpl	64	S1-	70 - 130			04/29/23 0, :49	04/29/23 19:40	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1040		5.04	mg/Kg			05/02/23 14:45	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: SW31

Lab Sample ID: 890-4582-6

Date Collected: 04/26/23 10:45

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 0-4'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 13:36	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 13:36	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 13:36	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		04/28/23 10:19	04/29/23 13:36	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 13:36	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		04/28/23 10:19	04/29/23 13:36	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	11y		70 - 130	04/29/23 10:1	04/2, /23 13:3y	1
1,2-Dichlorobenzene (Surr)	97		70 - 130	04/29/23 10:1	04/2, /23 13:3y	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			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *	49.8	mg/Kg		04/28/23 09:48	04/28/23 19:02	1
Diesel Range Organics (Over C10-C28)	<49.8	U *	49.8	mg/Kg		04/28/23 09:48	04/28/23 19:02	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		04/28/23 09:48	04/28/23 19:02	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-h chloroot 3ne	71		70 - 130	04/29/23 0, :49	04/29/23 1, :02	1
o-5erTcenpl	66	S1-	70 - 130	04/29/23 0, :49	04/29/23 1, :02	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	446		5.03	mg/Kg			05/02/23 14:50	1

Client Sample ID: SW30

Lab Sample ID: 890-4582-7

Date Collected: 04/26/23 11:20

Matrix: Solid

Date Received: 04/26/23 14:14

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		04/28/23 10:19	04/29/23 14:04	1
Toluene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 14:04	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 14:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 14:04	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		04/28/23 10:19	04/29/23 14:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		04/28/23 10:19	04/29/23 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130	04/29/23 10:1	04/2, /23 14:04	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: SW30

Lab Sample ID: 890-4582-7

Date Collected: 04/26/23 11:20

Matrix: Solid

Date Received: 04/26/23 14:14

Sample Depth: 0-4'

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2,4- <i>m</i> -Xylenes (Surr)	96		70 - 130	04/29/23 10:1	04/2, /23 14:04	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			04/30/23 14:19	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 19:23	1
Diesel Range Organics (Over C10-C28)	<49.9	U *	49.9	mg/Kg		04/28/23 09:48	04/28/23 19:23	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		04/28/23 09:48	04/28/23 19:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-h chloroot ~~ane~~	71		70 - 130			04/29/23 0, :49	04/29/23 1, :23	1
o-5erTcenpl	62	S1-	70 - 130			04/29/23 0, :49	04/29/23 1, :23	1

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	184		4.95	mg/Kg			05/02/23 14:55	1

Client Sample ID: SW32

Lab Sample ID: 890-4582-8

Date Collected: 04/26/23 11:25

Matrix: Solid

Date Received: 04/26/23 14:14

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		04/28/23 10:19	04/29/23 14:32	1
Toluene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 14:32	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 14:32	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		04/28/23 10:19	04/29/23 14:32	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		04/28/23 10:19	04/29/23 14:32	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		04/28/23 10:19	04/29/23 14:32	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	134	S1+	70 - 130			04/29/23 10:1,	04/2, /23 14:32	1
1,2,4-Fluorobenzene (Surr)	94		70 - 130			04/29/23 10:1,	04/2, /23 14:32	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			05/01/23 10:24	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			04/30/23 14:19	1

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Client Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Client Sample ID: SW32
Date Collected: 04/26/23 11:25
Date Received: 04/26/23 14:14
Sample Depth: 0-4'

Lab Sample ID: 890-4582-8
Matrix: Solid

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC)									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *-	50.0	mg/Kg		04/28/23 09:48	04/28/23 19:45	1	
Diesel Range Organics (Over C10-C28)	<50.0	U *-	50.0	mg/Kg		04/28/23 09:48	04/28/23 19:45	1	
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/28/23 09:48	04/28/23 19:45	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1-h cloroot æne	70		70 - 130			04/29/23 0, :49	04/29/23 1, :46	1	
o-5erTcenpl	62	S1-	70 - 130			04/29/23 0, :49	04/29/23 1, :46	1	

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	170		4.99	mg/Kg			05/02/23 15:01	1	

Surrogate Summary

Int Est uoinS
r joo/ EGD: r oLnj aULn 2 t E410HJob ID: 890-4381-C
GD5 : 06I C338C9P

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
890-4381-C	GA 19	COO	88
890-4381-C x G	GA 19	COO	8M
890-4381-C x GD	GA 19	CO6	93
890-4381-1	pG4PF	CO6	81
890-4381-6	pG3C	COM	9C
890-4381-4	pG31	CC3	88
890-4381-3	pG36	CCP	91
890-4381-P	GA 6C	CCP	8M
890-4381-M	GA 60	C11	83
890-4381-8	GA 61	CG4 GC7	84
al G 880-31C98K-F	aUb l ot ffoi GUS Vih	CO4	CO6
al GD 880-31C98Kl-F	aUb l ot ffoi GUS Vih DntW	CO4	9C
x B 880-31C98K-F	x nfhod BiUt L	P3 GC-	8P
x B 880-31C98K-F	x nfhod BiUt L	PP GC-	83
Surrogate Legend			
BpB = 4-BjoS ofimjobnt znt n (Gnjj)			
DpBZ = C,4-Dfmjobnt znt n (Gnjj)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-1MDD-F-C5 x G	x Ufe- GvLn	MC	3C GC-
880-1MDD-F-C-H x GD	x Ufe- GvLn DntW UEn	P8 GC-	48 GC-
890-4381-C	GA 19	M8	P0 GC-
890-4381-1	pG4PF	MP	39 GC-
890-4381-6	pG3C	MI	3P GC-
890-4381-4	pG31	MM	P0 GC-
890-4381-3	pG36	MC	34 GC-
890-4381-P	GA 6C	MC	33 GC-
890-4381-M	GA 60	MC	31 GC-
890-4381-8	GA 61	M0	31 GC-
al G 880-31C8Qk-F	aUb l ot ffoi GUS Vih	M0	36 GC-
al GD 880-31C8Q6-F	aUb l ot ffoi GUS Vih DntW	MI	36 GC-
x B 880-31C8QC-F	x nfhod BiUt L	PMGC-	PMGC-
Surrogate Legend			
Q O = Cl hiojoo/ EUn			
OTr H = o-Tnj Vhnt yi			

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-52138/5-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 52138

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/27/23 15:33	04/28/23 21:17	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/27/23 15:33	04/28/23 21:17	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/27/23 15:33	04/28/23 21:17	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/27/23 15:33	04/28/23 21:17	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/27/23 15:33	04/28/23 21:17	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/27/23 15:33	04/28/23 21:17	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92	S7-	01 - 731	14/: 0/: 3 7263	14/: 5/: 3 : 7670	7
7,4-Difluorobenzene (Surr)	59		01 - 731	14/: 0/: 3 7263	14/: 5/: 3 : 7670	7

Lab Sample ID: MB 880-52198/5-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 52198

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 10:53	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 10:53	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 10:53	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/28/23 10:19	04/29/23 10:53	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/28/23 10:19	04/29/23 10:53	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/28/23 10:19	04/29/23 10:53	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	S7-	01 - 731	14/: 5/: 3 7168	14/: 8/: 3 7163	7
7,4-Difluorobenzene (Surr)	52		01 - 731	14/: 5/: 3 7168	14/: 8/: 3 7163	7

Lab Sample ID: LCS 880-52198/1-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 52198

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1043		mg/Kg		104	70 - 130
Toluene	0.100	0.1034		mg/Kg		103	70 - 130
Ethylbenzene	0.100	0.08893		mg/Kg		89	70 - 130
m-Xylene & p-Xylene	0.200	0.1795		mg/Kg		90	70 - 130
o-Xylene	0.100	0.09175		mg/Kg		92	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	774		01 - 731
7,4-Difluorobenzene (Surr)	713		01 - 731

Lab Sample ID: LCSD 880-52198/2-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 52198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1119		mg/Kg		112	70 - 130	7	35

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

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

Lab Sample ID: LCSD 880-52198/2-A

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 52198

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.1137		mg/Kg		114	70 - 130	9	35
Ethylbenzene	0.100	0.09867		mg/Kg		99	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.2007		mg/Kg		100	70 - 130	11	35
o-Xylene	0.100	0.09984		mg/Kg		100	70 - 130	8	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	774		01 - 731
7,4-Difluorobenzene (Surr)	87		01 - 731

Lab Sample ID: 890-4582-1 MS

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: SW29

Prep Type: Total/NA

Prep Batch: 52198

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00198	U	0.0998	0.09653		mg/Kg		97	70 - 130
Toluene	<0.00198	U	0.0998	0.09489		mg/Kg		95	70 - 130
Ethylbenzene	<0.00198	U	0.0998	0.07945		mg/Kg		80	70 - 130
m-Xylene & p-Xylene	<0.00396	U	0.200	0.1595		mg/Kg		80	70 - 130
o-Xylene	<0.00198	U	0.0998	0.08015		mg/Kg		80	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
4-Bromofluorobenzene (Surr)	771		01 - 731
7,4-Difluorobenzene (Surr)	50		01 - 731

Lab Sample ID: 890-4582-1 MSD

Matrix: Solid

Analysis Batch: 52172

Client Sample ID: SW29

Prep Type: Total/NA

Prep Batch: 52198

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00198	U	0.100	0.1091		mg/Kg		109	70 - 130	12	35
Toluene	<0.00198	U	0.100	0.1064		mg/Kg		106	70 - 130	11	35
Ethylbenzene	<0.00198	U	0.100	0.08937		mg/Kg		89	70 - 130	12	35
m-Xylene & p-Xylene	<0.00396	U	0.201	0.1785		mg/Kg		89	70 - 130	11	35
o-Xylene	<0.00198	U	0.100	0.08903		mg/Kg		89	70 - 130	10	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	773		01 - 731
7,4-Difluorobenzene (Surr)	82		01 - 731

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

Lab Sample ID: MB 880-52181/1-A

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 52181

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		04/28/23 09:48	04/28/23 09:19	1

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

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

Lab Sample ID: MB 880-52181/1-A

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 52181

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		04/28/23 09:48	04/28/23 09:19	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		04/28/23 09:48	04/28/23 09:19	1
Surrogate	MB %Recovery	MB Qualifier	Limits			Prepared	Analyzed	Dil Fac
7-Chlorooctane	90	S7-	01 - 731			14/ 5/ 3 1865	14/ 5/ 3 1868	7
o-Terphenyl	90	S7-	01 - 731			14/ 5/ 3 1865	14/ 5/ 3 1868	7

Lab Sample ID: LCS 880-52181/2-A

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 52181

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	895.1		mg/Kg		90	70 - 130
Diesel Range Organics (Over C10-C28)	1000	811.1		mg/Kg		81	70 - 130
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
7-Chlorooctane	01		01 - 731				
o-Terphenyl	23	S7-	01 - 731				

Lab Sample ID: LCSD 880-52181/3-A

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 52181

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	903.2		mg/Kg		90	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	1000	845.3		mg/Kg		85	70 - 130	4	20
Surrogate	LCSD %Recovery	LCSD Qualifier	Limits						
7-Chlorooctane	0:		01 - 731						
o-Terphenyl	23	S7-	01 - 731						

Lab Sample ID: 880-27710-A-1-G MS

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 52181

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- F1	999	655.2	F1	mg/Kg		66	70 - 130
Diesel Range Organics (Over C10-C28)	<49.9	U *- F1	999	519.9	F1	mg/Kg		52	70 - 130
Surrogate	MS %Recovery	MS Qualifier	Limits						
7-Chlorooctane	07		01 - 731						
o-Terphenyl	27	S7-	01 - 731						

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QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4582-1
SDG: 03C1558196

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

Lab Sample ID: 880-27710-A-1-H MSD

Matrix: Solid

Analysis Batch: 52159

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 52181

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *- F1	997	628.7	F1	mg/Kg		63	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	<49.9	U *- F1	997	492.8	F1	mg/Kg		49	70 - 130	5	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
7-Chlorooctane	95	S7-	01 - 731								
o-Terphenyl	45	S7-	01 - 731								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-52210/1-A

Matrix: Solid

Analysis Batch: 52403

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			05/02/23 12:20	1

Lab Sample ID: LCS 880-52210/2-A

Matrix: Solid

Analysis Batch: 52403

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	250	235.1		mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-52210/3-A

Matrix: Solid

Analysis Batch: 52403

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	235.7		mg/Kg		94	90 - 110	0	20

Lab Sample ID: 890-4582-2 MS

Matrix: Solid

Analysis Batch: 52403

Client Sample ID: FS46A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Chloride	274		251	525.0		mg/Kg		100	90 - 110

Lab Sample ID: 890-4582-2 MSD

Matrix: Solid

Analysis Batch: 52403

Client Sample ID: FS46A

Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	274		251	524.2		mg/Kg		100	90 - 110	0	20

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QC Association Summary

Int Est uoinS
r jon/ EGE: r oLnj aUn 2t E410H

Job ID: 890-4381-C
GD5 : 06I C338C9P

GC VOA

Prep Batch: 52138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-31C68K3-A	MnEdod BiUt L	ToEJIKNA	Goied	3063	

Analysis Batch: 52172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJIKNA	Goied	801CB	31C98
890-4381-1	WG4PA	ToEJIKNA	Goied	801CB	31C98
890-4381-6	WG3C	ToEJIKNA	Goied	801CB	31C98
890-4381-4	WG31	ToEJIKNA	Goied	801CB	31C98
890-4381-3	WG36	ToEJIKNA	Goied	801CB	31C98
890-4381-P	GF 6C	ToEJIKNA	Goied	801CB	31C98
890-4381-7	GF 60	ToEJIKNA	Goied	801CB	31C98
890-4381-8	GF 61	ToEJIKNA	Goied	801CB	31C98
MB 880-31C68K3-A	MnEdod BiUt L	ToEJIKNA	Goied	801CB	31C68
MB 880-31C98K3-A	MnEdod BiUt L	ToEJIKNA	Goied	801CB	31C98
al G 880-31C98K3-A	aUb l ot Eoi GUS pin	ToEJIKNA	Goied	801CB	31C98
al GD 880-31C98K1-A	aUb l ot Eoi GUS pin Dmp	ToEJIKNA	Goied	801CB	31C98
890-4381-CMG	GF 19	ToEJIKNA	Goied	801CB	31C98
890-4381-CMGD	GF 19	ToEJIKNA	Goied	801CB	31C98

Prep Batch: 52198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJIKNA	Goied	3063	
890-4381-1	WG4PA	ToEJIKNA	Goied	3063	
890-4381-6	WG3C	ToEJIKNA	Goied	3063	
890-4381-4	WG31	ToEJIKNA	Goied	3063	
890-4381-3	WG36	ToEJIKNA	Goied	3063	
890-4381-P	GF 6C	ToEJIKNA	Goied	3063	
890-4381-7	GF 60	ToEJIKNA	Goied	3063	
890-4381-8	GF 61	ToEJIKNA	Goied	3063	
MB 880-31C98K3-A	MnEdod BiUt L	ToEJIKNA	Goied	3063	
al G 880-31C98K3-A	aUb l ot Eoi GUS pin	ToEJIKNA	Goied	3063	
al GD 880-31C98K1-A	aUb l ot Eoi GUS pin Dmp	ToEJIKNA	Goied	3063	
890-4381-CMG	GF 19	ToEJIKNA	Goied	3063	
890-4381-CMGD	GF 19	ToEJIKNA	Goied	3063	

Analysis Batch: 52281

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-1	WG4PA	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-6	WG3C	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-4	WG31	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-3	WG36	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-P	GF 6C	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-7	GF 60	ToEJIKNA	Goied	ToEJ BTs x	
890-4381-8	GF 61	ToEJIKNA	Goied	ToEJ BTs x	

GC Semi VOA

Analysis Batch: 52159

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJIKNA	Goied	80C3B NM	31C8C

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QC Association Summary

Int Est uoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4381-C
GD5 : 06I C338C9P

GC Semi VOA (Continued)

Analysis Batch: 52159 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-1	WG4PA	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-6	WG3C	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-4	WG31	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-3	WG36	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-P	GF 6C	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-7	GF 60	ToEJHNA	Goied	80C3B NM	31C8C
890-4381-8	GF 61	ToEJHNA	Goied	80C3B NM	31C8C
MB 880-31C8QC-A	MnEhod BiUt L	ToEJHNA	Goied	80C3B NM	31C8C
al G 880-31C8QK1-A	aUb l ot Eoi GUS pin	ToEJHNA	Goied	80C3B NM	31C8C
al GD 880-31C8Q6-A	aUb l ot Eoi GUS pin Dmp	ToEJHNA	Goied	80C3B NM	31C8C
880-177C0-A-C-5 MG	MUEK GpLn	ToEJHNA	Goied	80C3B NM	31C8C
880-177C0-A-C-H MGD	MUEK GpLn Dmpid UEn	ToEJHNA	Goied	80C3B NM	31C8C

Prep Batch: 52181

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJHNA	Goied	80C3NM r jnp	
890-4381-1	WG4PA	ToEJHNA	Goied	80C3NM r jnp	
890-4381-6	WG3C	ToEJHNA	Goied	80C3NM r jnp	
890-4381-4	WG31	ToEJHNA	Goied	80C3NM r jnp	
890-4381-3	WG36	ToEJHNA	Goied	80C3NM r jnp	
890-4381-P	GF 6C	ToEJHNA	Goied	80C3NM r jnp	
890-4381-7	GF 60	ToEJHNA	Goied	80C3NM r jnp	
890-4381-8	GF 61	ToEJHNA	Goied	80C3NM r jnp	
MB 880-31C8QC-A	MnEhod BiUt L	ToEJHNA	Goied	80C3NM r jnp	
al G 880-31C8QK1-A	aUb l ot Eoi GUS pin	ToEJHNA	Goied	80C3NM r jnp	
al GD 880-31C8Q6-A	aUb l ot Eoi GUS pin Dmp	ToEJHNA	Goied	80C3NM r jnp	
880-177C0-A-C-5 MG	MUEK GpLn	ToEJHNA	Goied	80C3NM r jnp	
880-177C0-A-C-H MGD	MUEK GpLn Dmpid UEn	ToEJHNA	Goied	80C3NM r jnp	

Analysis Batch: 52242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	ToEJHNA	Goied	80C3 NM	
890-4381-1	WG4PA	ToEJHNA	Goied	80C3 NM	
890-4381-6	WG3C	ToEJHNA	Goied	80C3 NM	
890-4381-4	WG31	ToEJHNA	Goied	80C3 NM	
890-4381-3	WG36	ToEJHNA	Goied	80C3 NM	
890-4381-P	GF 6C	ToEJHNA	Goied	80C3 NM	
890-4381-7	GF 60	ToEJHNA	Goied	80C3 NM	
890-4381-8	GF 61	ToEJHNA	Goied	80C3 NM	

HPLC/IC

Leach Batch: 52210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	Goinbin	Goied	DI anU/ h	
890-4381-1	WG4PA	Goinbin	Goied	DI anU/ h	
890-4381-6	WG3C	Goinbin	Goied	DI anU/ h	
890-4381-4	WG31	Goinbin	Goied	DI anU/ h	
890-4381-3	WG36	Goinbin	Goied	DI anU/ h	
890-4381-P	GF 6C	Goinbin	Goied	DI anU/ h	
890-4381-7	GF 60	Goinbin	Goied	DI anU/ h	

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QC Association Summary

Client EstuoinS
r jon/ EGE: r oLnj aULn 2t E410H

Job ID: 890-4381-C
GD5 : 06I C338C9P

HPLC/IC (Continued)

Leach Batch: 52210 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-8	GF 61	Goinbin	Goied	DI anU/h	
MB 880-31100K-A	MnEdod BiUt L	Goinbin	Goied	DI anU/h	
al G 880-31100Kl-A	aUb l ot ffoi GUS pin	Goinbin	Goied	DI anU/h	
al GD 880-31100K6-A	aUb l ot ffoi GUS pin Dmp	Goinbin	Goied	DI anU/h	
890-4381-1 MG	WG4PA	Goinbin	Goied	DI anU/h	
890-4381-1 MGD	WG4PA	Goinbin	Goied	DI anU/h	

Analysis Batch: 52403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4381-C	GF 19	Goinbin	Goied	600.0	31100
890-4381-1	WG4PA	Goinbin	Goied	600.0	31100
890-4381-6	WG3C	Goinbin	Goied	600.0	31100
890-4381-4	WG31	Goinbin	Goied	600.0	31100
890-4381-3	WG36	Goinbin	Goied	600.0	31100
890-4381-P	GF 6C	Goinbin	Goied	600.0	31100
890-4381-7	GF 60	Goinbin	Goied	600.0	31100
890-4381-8	GF 61	Goinbin	Goied	600.0	31100
MB 880-31100K-A	MnEdod BiUt L	Goinbin	Goied	600.0	31100
al G 880-31100Kl-A	aUb l ot ffoi GUS pin	Goinbin	Goied	600.0	31100
al GD 880-31100K6-A	aUb l ot ffoi GUS pin Dmp	Goinbin	Goied	600.0	31100
890-4381-1 MG	WG4PA	Goinbin	Goied	600.0	31100
890-4381-1 MGD	WG4PA	Goinbin	Goied	600.0	31100

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Client Sample ID: SF 05
Date Collectex: 8- 0/ 02 85:- 8
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589- 4A09B
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.03 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 11:20	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 1X:14	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:02	SMC	EET MID

Client Sample ID: NS- / P
Date Collectex: 8- 0/ 02 85:48
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589- 4A09D
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 11:4X	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.04 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 1X:56	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:0X	SMC	EET MID

Client Sample ID: NS43
Date Collectex: 8- 0/ 02 38:28
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589- 4A09E
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.05 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 12:14	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.04 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 1X:3X	AJ	EET MID
Soluble	Leach	DI Leach			3.01 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:25	SMC	EET MID

Client Sample ID: NS40
Date Collectex: 8- 0/ 02 38:24
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589- 4A09F
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.01 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 12:41	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID

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Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Client Sample ID: NS40

Lab Sample ID: A589-4A09

Date Collectex: 8- ~~0~~/ ~~0~~2 38:24

1 atriM Solix

Date Receivex: 8- ~~0~~/ ~~0~~2 3- :3-

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.00 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 18:18	AJ	EET MID
Soluble	Leach	DI Leach			3.04 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:28	SMC	EET MID

Client Sample ID: NS42

Lab Sample ID: A589-4A09

Date Collectex: 8- ~~0~~/ ~~0~~2 38:- 8

1 atriM Solix

Date Receivex: 8- ~~0~~/ ~~0~~2 3- :3-

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.9X g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 15:09	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 18:40	AJ	EET MID
Soluble	Leach	DI Leach			4.96 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:43	SMC	EET MID

Client Sample ID: SF 23

Lab Sample ID: A589-4A09

Date Collectex: 8- ~~0~~/ ~~0~~2 38:- 4

1 atriM Solix

Date Receivex: 8- ~~0~~/ ~~0~~2 3- :3-

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			4.99 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 15:56	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.04 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 19:02	AJ	EET MID
Soluble	Leach	DI Leach			4.9X g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:30	SMC	EET MID

Client Sample ID: SF 28

Lab Sample ID: A589-4A09

Date Collectex: 8- ~~0~~/ ~~0~~2 33:08

1 atriM Solix

Date Receivex: 8- ~~0~~/ ~~0~~2 3- :3-

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breporex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.02 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 14:04	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.02 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 19:25	AJ	EET MID

Euroins Carlsbaf

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Client Sample ID: SF 28
Date Collectex: 8- 0/ 02 33:08
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589-4A097
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Soluble	Leach	DI Leach			3.03 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 14:33	SMC	EET MID

Client Sample ID: SF 20
Date Collectex: 8- 0/ 02 33:04
Date Receivex: 8- 0/ 02 3- :3-

Lab Sample ID: A589-4A09A
1 atriM Solix

Brep 6Tpe	y atch 6Tpe	y atch 1 ethox	Run	Dil Nactor	Initial Pmount	Ninal Pmount	y atch Wumber	Breparex or PnalTzex	PnalTst	Lab
Total/NA	Prep	3053			3.03 g	3 mL	32198	04/28/25 10:19	MNR	EET MID
Total/NA	Analysis	8021B		1	3 mL	3 mL	321X2	04/29/25 14:52	MNR	EET MID
Total/NA	Analysis	Total BTE7		1			32281	03/01/25 10:24	SM	EET MID
Total/NA	Analysis	8013 NM		1			32242	04/50/25 14:19	AJ	EET MID
Total/NA	Prep	8013NM Prep			10.01 g	10 mL	32181	04/28/25 09:48	AM	EET MID
Total/NA	Analysis	8013B NM		1	1 uL	1 uL	32139	04/28/25 19:43	AJ	EET MID
Soluble	Leach	DI Leach			3.01 g	30 mL	32210	04/28/25 11:2X	KS	EET MID
Soluble	Analysis	500.0		1	30 mL	30 mL	32405	03/02/25 13:01	SMC	EET MID

LaboratorT References:
EET MID d Euro=ns Mif lanf , 1211 W. Florif a Ave, Mif lanf , T7 X9X01, TEL (452)X04-3440

Accreditation/Certification Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-23	06-50-25

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
8013 NM		Solid	Total TPH
Total BTEX		Solid	Total BTEX

Method Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 890-4382-1
SDG: 05C1338196

Method	Method Description	Protocol	Laboratory
8021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8013 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8013B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
500.0	Anions, Ion Chromatography	EPA	EET MID
3053	Closed System Purge and Trap	SW846	EET MID
8013NM 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 (452)704-3440

Sample Summary

Client: Ensolum
r joe/ tkGite: r oLej aUle 2 nit 410H

Job ID: 890-4381-S
GD5 : 06CS338S9P

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4381-S	GF 19	GoliA	04klPk16 09:40	04klPk16 S4:S4	0-4d
890-4381-1	' G4PW	GoliA	04klPk16 09:30	04klPk16 S4:S4	4d
890-4381-6	' G3S	GoliA	04klPk16 S0:60	04klPk16 S4:S4	4d
890-4381-4	' G31	GoliA	04klPk16 S0:63	04klPk16 S4:S4	4d
890-4381-3	' G36	GoliA	04klPk16 S0:40	04klPk16 S4:S4	4d
890-4381-P	GF 6S	GoliA	04klPk16 S0:43	04klPk16 S4:S4	0-4d
890-4381-7	GF 60	GoliA	04klPk16 SS:10	04klPk16 S4:S4	0-4d
890-4381-8	GF 61	GoliA	04klPk16 SS:13	04klPk16 S4:S4	0-4d



Chain of Custody

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

Work Order No: _____

www.xenco.com Page _____ of _____

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

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	
State of Project:	
Reporting Level I ☐ Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number:	03C1558196	Due Date:			
Project Location:	Connor Whitman	TAT starts the day received by the lab, if received by 4:30pm			
Sampler's Name:					
PO #:					
SAMPLE RECEIPT		Temp Blank:	☒ Yes ☐ No	Wet Ice:	☒ Yes ☐ No
Samples Received Inact:	☒ Yes ☐ No	Thermometer ID:			
Cooler Custody Seals:	☒ Yes ☐ No	Correction Factor:			
Sample Custody Seals:	☒ Yes ☐ No	Temperature Reading:			
Total Containers:		Corrected Temperature:			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grav/Comp
SV29	S	4/24/23	340	0-4'	C 1
F346A			355	4'	C 1
F351			1030	4'	C 1
F352			1035	4'	C 1
F353			1040	4'	C 1
SV31			1045	0-4'	C 1
SV30			1120	0-4'	C 1
SV32			1125	0-4'	C 1
ANALYSIS REQUEST					
Parameters					
CHLORIDES (EPA: 3000.0)					
TPH (8015)					
BTEX (8021)					
PRESERVATIVE CODES					
None: NO ☐ DI Water: H ₂ O ☐					
Cool: Cool ☐ MeOH: Me ☐					
HCL: HC ☐ HNO ₃ : HN ☐					
H ₂ SO ₄ : H ₂ ☐ NaOH: Na ☐					
H ₃ PO ₄ : HP ☐					
NaHSO ₄ : NABIS ☐					
Na ₂ S ₂ O ₅ : NASO ₅ ☐					
Zn Acetate+NaOH: Zn ☐					
NaOH+Ascorbic Acid: SACP ☐					
Sample Comments					
Incident ID: NAB1834656162					
Cost Center: 1139851001					
AFE: PA 2022 04878 EXP 01					



890-4582 Chain of Custody

Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag 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
1 <i>CTH</i>	<i>Garrett Green</i>	4/24/23 14:18			
3		4			
5		6			

Revised Date: 06/25/2020 Rev: 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4382-1

SDG Number: 05C1338196

Login Number: 4582

List Number: 1

Creator: Stutzman, Amanda

List Source: Eurofins Carlsbad

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

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4382-1

SDG Number: 05C1338196

Login Number: 4582

List Number: 2

Creator: Rodriguez, Leticia

List Source: Eurofins Midland

List Creation: 04/28/23 10:06 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	



Environment Testing

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 4/6/2023 10:23:17 AM

JOB DESCRIPTION

Poker Lake Unit 420H
SDG NUMBER 03C1558196

JOB NUMBER

880-26437-1

Eurofins Midland
1211 W. Florida Ave
Midland TX 79701

Eurofins Midland

Job Notes

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

Authorization



Generated
4/6/2023 10:23:17 AM

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

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Laboratory Job ID: 880-26437-1
SDG: 03C1558196

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Definitions/Glossary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

Qualifiers

GC VOA

Qualifier	Qualifier Description
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, low biased.
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 420H

Job ID: 880-26437-1
SDG: 03C1558196

Job ID: 880-26437-1**Laboratory: Eurofins Midland****Narrative****Job Narrative
880-26437-1****Receipt**

The sample was received on 3/24/2023 3:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 0.8°C

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-50003/2-A) and (LCSD 880-50003/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (880-26432-A-4-C MS) and (880-26432-A-4-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The laboratory control sample (LCS) associated with preparation batch 880-50003 and analytical batch 880-49993 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.

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 420H

Job ID: 880-26437-1
SDG: 03C1558196

Client Sample ID: SW16

Lab Sample ID: 880-26437-1

Date Collected: 03/24/23 10:45

Matrix: Solid

Date Received: 03/24/23 15:17

Sample Depth: 0 - 3'

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		04/03/23 14:18	04/05/23 15:24	1
Toluene	<0.00201	U	0.00201	mg/Kg		04/03/23 14:18	04/05/23 15:24	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		04/03/23 14:18	04/05/23 15:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		04/03/23 14:18	04/05/23 15:24	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		04/03/23 14:18	04/05/23 15:24	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		04/03/23 14:18	04/05/23 15:24	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	924		70 - 910	04/03/23 14:18	04/05/23 15:24	9
9-Fluorobenzene (Surr)	11		70 - 910	04/03/23 14:18	04/05/23 15:24	9

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			04/05/23 16:40	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	500		50.0	mg/Kg			04/03/23 10:59	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/31/23 08:54	04/01/23 05:47	1
Diesel Range Organics (Over C10-C28)	500	*-	50.0	mg/Kg		03/31/23 08:54	04/01/23 05:47	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/31/23 08:54	04/01/23 05:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
9-Fluorobenzene	72		70 - 910	01/31/23 08:54	04/09/23 05:47	9
o-Terphenyl	72		70 - 910	01/31/23 08:54	04/09/23 05:47	9

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	201		5.03	mg/Kg			04/05/23 22:21	1

Eurofins Midland

Surrogate Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	BFB1 (70-130)	DFBZ1 (70-130)
880-26437-1	SW16	124	88
LCS 880-50209/1-A	Lab Control Sample	107	114
LCSD 880-50209/2-A	Lab Control Sample Dup	86	118
MB 880-49835/5-A	Method Blank	78	94
MB 880-50209/5-A	Method Blank	69 S1-	97
Surrogate Legend			
BFB = 4-Bromofluorobenzene (Surr)			
DFBZ = 1,4-Difluorobenzene (Surr)			

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)	
Lab Sample ID	Client Sample ID	1CO1 (70-130)	OTPH1 (70-130)
880-26437-1	SW16	96	72
LCS 880-50003/2-A	Lab Control Sample	81	61 S1-
LCSD 880-50003/3-A	Lab Control Sample Dup	71	56 S1-
MB 880-50003/1-A	Method Blank	113	89
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-49835/5-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 49835

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		03/29/23 12:18	04/04/23 21:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		03/29/23 12:18	04/04/23 21:45	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		97 - 017	713 63 1 0/:02	743743 1 / 0:45	0
0,4-Difluorobenzene (Surr)	64		97 - 017	713 63 1 0/:02	743743 1 / 0:45	0

Lab Sample ID: MB 880-50209/5-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50209

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Toluene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		04/03/23 14:18	04/05/23 08:52	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		04/03/23 14:18	04/05/23 08:52	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86	S0-	97 - 017	743713 1 04:02	743753 1 72:5/	0
0,4-Difluorobenzene (Surr)	69		97 - 017	743713 1 04:02	743753 1 72:5/	0

Lab Sample ID: LCS 880-50209/1-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.100	0.1027		mg/Kg		103	70 - 130
Toluene	0.100	0.09639		mg/Kg		96	70 - 130
Ethylbenzene	0.100	0.09214		mg/Kg		92	70 - 130
m-Xylene & p-Xylene	0.200	0.1893		mg/Kg		95	70 - 130
o-Xylene	0.100	0.09706		mg/Kg		97	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	079		97 - 017
0,4-Difluorobenzene (Surr)	004		97 - 017

Lab Sample ID: LCSD 880-50209/2-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	Limit
Benzene	0.100	0.1069		mg/Kg		107	70 - 130	4	35

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

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

Lab Sample ID: LCSD 880-50209/2-A

Matrix: Solid

Analysis Batch: 50285

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50209

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene	0.100	0.08523		mg/Kg		85	70 - 130	12	35
Ethylbenzene	0.100	0.07724		mg/Kg		77	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.1525		mg/Kg		76	70 - 130	22	35
o-Xylene	0.100	0.07833		mg/Kg		78	70 - 130	21	35

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
4-Bromofluorobenzene (Surr)	28		97 - 017
0,4-Difluorobenzene (Surr)	002		97 - 017

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

Lab Sample ID: MB 880-50003/1-A

Matrix: Solid

Analysis Batch: 49993

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 50003

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		03/31/23 08:54	03/31/23 20:55	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		03/31/23 08:54	03/31/23 20:55	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		03/31/23 08:54	03/31/23 20:55	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
0-Chlorooctane	001		97 - 017	71303 1 72:54	71303 1 / 7:55	0
o-Terphenyl	26		97 - 017	71303 1 72:54	71303 1 / 7:55	0

Lab Sample ID: LCS 880-50003/2-A

Matrix: Solid

Analysis Batch: 49993

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 50003

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1116		mg/Kg		112	70 - 130
Diesel Range Organics (Over C10-C28)	1000	693.4	*-	mg/Kg		69	70 - 130

Surrogate	LCS %Recovery	LCS Qualifier	Limits
0-Chlorooctane	20		97 - 017
o-Terphenyl	80	S0-	97 - 017

Lab Sample ID: LCSD 880-50003/3-A

Matrix: Solid

Analysis Batch: 49993

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 50003

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	1000	964.7		mg/Kg		96	70 - 130	15	20
Diesel Range Organics (Over C10-C28)	1000	614.8	*-	mg/Kg		61	70 - 130	12	20

Eurofins Midland

QC Sample Results

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

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

Lab Sample ID: LCSD 880-50003/3-A
Matrix: Solid
Analysis Batch: 49993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 50003

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
<i>n</i> -Chlorooctane	90		97 - 017
<i>o</i> -Terphenyl	58	S0-	97 - 017

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-50171/1-A
Matrix: Solid
Analysis Batch: 50436

Client Sample ID: Method Blank
Prep Type: Soluble

	MB	MB							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil	Fac
Chloride	<5.00	U	5.00	mg/Kg			04/05/23 20:21		1

Lab Sample ID: LCS 880-50171/2-A
Matrix: Solid
Analysis Batch: 50436

Client Sample ID: Lab Control Sample
Prep Type: Soluble

	Spike	LCS	LCS					%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	250	254.0		mg/Kg		102	90 - 110		

Lab Sample ID: LCSD 880-50171/3-A
Matrix: Solid
Analysis Batch: 50436

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

	Spike	LCSD	LCSD					%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Chloride	250	254.2		mg/Kg		102	90 - 110	0	20		

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

GC VOA

Prep Batch: 49835

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-49835/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 50209

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	5035	
MB 880-50209/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-50209/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-50209/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 50285

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	8021B	50209
MB 880-49835/5-A	Method Blank	Total/NA	Solid	8021B	49835
MB 880-50209/5-A	Method Blank	Total/NA	Solid	8021B	50209
LCS 880-50209/1-A	Lab Control Sample	Total/NA	Solid	8021B	50209
LCSD 880-50209/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	50209

Analysis Batch: 50428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 49993

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	8015B NM	50003
MB 880-50003/1-A	Method Blank	Total/NA	Solid	8015B NM	50003
LCS 880-50003/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	50003
LCSD 880-50003/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	50003

Prep Batch: 50003

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	8015NM Prep	
MB 880-50003/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-50003/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-50003/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	

Analysis Batch: 50164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 50171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Soluble	Solid	DI Leach	
MB 880-50171/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-50171/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-50171/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Midland

QC Association Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

HPLC/IC

Analysis Batch: 50436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-26437-1	SW16	Soluble	Solid	300.0	50171
MB 880-50171/1-A	Method Blank	Soluble	Solid	300.0	50171
LCS 880-50171/2-A	Lab Control Sample	Soluble	Solid	300.0	50171
LCSD 880-50171/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	50171

- 1
- 2
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- 11
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- 14

Lab Chronicle

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

Client Sample ID: SW16

Date Collected: 03/24/23 10:45

Date Received: 03/24/23 15:17

Lab Sample ID: 880-26437-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			50209	MNR	EET MID	04/03/23 14:18
Total/NA	Analysis	8021B		1	50285	MNR	EET MID	04/05/23 15:24
Total/NA	Analysis	Total BTEX		1	50428	AJ	EET MID	04/05/23 16:40
Total/NA	Analysis	8015 NM		1	50164	SM	EET MID	04/03/23 10:59
Total/NA	Prep	8015NM Prep			50003	AJ	EET MID	03/31/23 08:54
Total/NA	Analysis	8015B NM		1	49993	SM	EET MID	04/01/23 05:47
Soluble	Leach	DI Leach			50171	KS	EET MID	04/03/23 11:17
Soluble	Analysis	300.0		1	50436	SMC	EET MID	04/05/23 22:21

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

Accreditation/Certification Summary

Client: Ensolum
r joæ/ t& ite: r oLej aULe Hnit 3- 9G

Job ID: 8890-4321P
k D5 : 92CP668Ph4

Laboratory: Eurofins Midland

Hnless otwejd ise note, yUI UhUf tes voj twis lUbojUtojf d eje / o. eje, un, ej eU'wU' / je, itUion\$ejtív/ Ution belod T

Authority	Program	Identification Number	Expiration Date
xeNJs	AEa7r	xP931933990 - 0-6	940290-2
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twe Ugen/ f , oes not ovej / ejtív/ UtionT			
7nUf sis Metwo,	r jep Metwo,	MUj iN	7nUf te
89P6 AM		koli,	xotU xr G
xotU BxEX		koli,	xotU BxEX

Method Summary

Ident Est uoinS
r joon/ EGE: r oLnj aULn Ht eE3- 9W

Job ID: 8890-43210C
GD5 : 92I 0668CP4

Method	Method Description	Protocol	Laboratory
89- CV	CoiUen gjpUt e l oS dont (u)5I T	GB 834	ssMAID
MbEj VMsN	MbEj VMsN I U/ miUet	MKa Gg r	ssMAID
8906 RA	Dæuni . Ut pn gjpUt e u)D. g T)5I T	GB 834	ssMAID
8906V RA	Dæuni . Ut pn gjpUt e u)D. g T)5I T	GB 834	ssMAID
299,9	Xt æt uhlot l yjoS Uæpj Udyx	s r X	ssMAID
6926	l ioun(GxuæS r njpn Ut (MJUd	GB 834	ssMAID
8906RA r jnd	A æ jonzEj U æt	GB 834	ssMAID
DI anU/ y	Dnæ æn(B Uæj anU/ y æ p r jo/ n(njn	XGMA	ssMAID

Protocol References:

XGMA v XGMA It Eñjt Uætt U
sr Xv HGst "æt Snt Eñ r joen/ æt Xpnt / x
GB 834 v RhuEA nEyo(u f oj s "UntUæ p Goiæ B Uæñhr yxuæ Uñ ynS æ U A nEyo(uñhMyæ(s(æt hRo" nS bnj CP84 Xt (lE Hd(Uæu,
MKa Gg r v MhuKS njæ UaUboj UæjæuhGEU (Uj(g dnjUæ p r jo/ n(njn

Laboratory References:

ssMAID v smjoæ u A æ iUt (hC- CC B , f iojæ UX" nhA æ iUt (hMN 1P19ChMæ a)32- T19306339

smjoæ u A æ iUt (

Sample Summary

Client: Ensolum
Project/Site: Poker Lake Unit 420H

Job ID: 880-26437-1
SDG: 03C1558196

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
880-26437-1	SW16	Solid	03/24/23 10:45	03/24/23 15:17	0 - 3'

- 1
- 2
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- 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) 565-3443 Lubbock, TX (806) 794-1296
Hobbs NM (575) 392-7550 Carlsbad NM (575) 988-3199

Wor



880-26437 Chain of Custody

www.xenco.com Page 1 of 1

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

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

Project Name	Poker Lake Unit 420H	Turn Around	☒ Routine ☐ Rush	Pres. Code	
Project Number	03C1558196	Due Date			
Project Location		TAT starts the day received by the lab if received by 4:30pm			
Sampler's Name	Connor Whitman				
PO #					
SAMPLE RECEIPT	Temp Blank ☒ Yes ☒ No	Wet Ice	☒ Yes ☒ No		
Samples Received Intact	☒ Yes ☐ No	Thermometer ID	1111-1007		
Cooler Custody Seals	☒ Yes ☐ No	Correction Factor	0.0		
Sample Custody Seals	☒ Yes ☐ No	Temperature Reading	1.8		
Total Containers		Corrected Temperature	0.8		

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/Comp	# of Cont	ANALYSIS REQUEST	Preservative Codes
SL/LC	S	3/24/20	10:45	0-3'	C	1	CHLORIDES (EPA. 3000 D) TPH (8015) BTX (8021)	None NO Cool Cool HCL HC H ₂ SO ₄ H ₂ H ₃ PO ₄ HP NaHSO ₄ NABIS Na ₂ S ₂ O ₃ NaSO ₃ Zn Acetate+NaOH Zn NaOH+Ascorbic Acid SAPC
							Sample Comments	
							Incident ID	nAB1834656162
							Cost Center	1139851001
							AFE	PA.2022 04878 EXP 01

Total 200.7 / 6010	200.8 / 6020:	8RCRA 13PPM Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr 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>[Signature]</i>	<i>[Signature]</i>	3/24/23 15:17			

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 880-26437-1

SDG Number: 03C1558196

Login Number: 26437

List Number: 1

Creator: Kramer, Jessica

List Source: Eurofins Midland

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	



APPENDIX D NMOCD Correspondence

Hamlet, Robert, EMNRD

From: Hamlet, Robert, EMNRD
Sent: Monday, March 18, 2019 2:05 PM
To: 'Adrian Baker'
Cc: Littrell, Kyle; Ashley Ager; Bratcher, Mike, EMNRD; Venegas, Victoria, EMNRD; Jim Amos (jamos@blm.gov); dmckinne@blm.gov; Weaver, Crystal (caweaver@blm.gov)
Subject: Deferral request accepted - Poker Lake Unit #420 (2RP-5102) (30-015-39795) 11/19/2018
Attachments: Deferral Request Accepted 2RP-5102.pdf

Adrian,

LT Environmental's closure report for the above release, requests areas impacted by the release, be deferred for remediation until future major well pad construction/alteration or final plugging and abandonment, whichever occurs first. The areas requested for deferral are identified on the site map as FS14, FS15, SW06, and SW09 through SW11. The areas have been delineated and documented in the report. At this time, OCD approves this request. The Final Report C-141 will be accepted for record and marked accordingly. The release will remain open in OCD database files and reflect an open environmental issue. This is a Federal site and will require like approval from BLM.

Thank you,

Robert J Hamlet
State of New Mexico
Energy, Minerals, and Natural Resources
Oil Conservation Division
811 S. First St., Artesia NM 88210
(575) 840-5963
Robert.Hamlet@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

From: Adrian Baker <abaker@ltenv.com>
Sent: Thursday, February 28, 2019 5:25 PM
To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; jamos@blm.gov; dmckinne@blm.gov
Cc: Littrell, Kyle <Kyle_Littrell@xtoenergy.com>; Ashley Ager <aager@ltenv.com>
Subject: [EXT] Closure request Poker Lake Unit #420/2RP-5102

All,

Attached is the closure request for the recent release at Poker Lake Unit #420/2RP-5102. If you have any questions, please do not hesitate to contact myself or Kyle Littrell at XTO.

Thank you



Adrian Baker

Project Geologist/Office Manager

432.894.5641 cell

432.704.5178 direct

3300 N "A" Street, Building 1, Unit 103, Midland, TX 79705

www.ltenv.com



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September 1, 2023

New Mexico Oil Conservation Division

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

**Re: Closure Request Addendum
Poker Lake Unit #420 Battery
Incident Number NAB1834656162
Eddy County, New Mexico**

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc (XTO), has prepared this *Closure Request Addendum* to document excavation and confirmation soil sampling activities of deferred residual soil impacts at the Poker Lake Unit #420 Battery (Site). Deferral of residual impacted soil under active production equipment was previously documented in a *Closure Request* approved by the NMOCD. Removal of the soil impacts was conducted as part of the recent plugging and abandonment of the production well and reclamation of the well pad. Based on field observations and laboratory analytical results following excavation of residually impacted soil, XTO is submitting this *Closure Request Addendum* describing additional excavation activities that have occurred and requesting no further action for Incident Number NAB1834656162.

SITE DESCRIPTION AND BACKGROUND

The Site is located in Unit P, Section 28, Township 25 South, Range 31 East, in Eddy County, New Mexico (32.150097°, -103.991664°; Figure 1) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On November 19, 2018, a gasket connected to a heater treater failed resulting in the release of 19.5 barrels (bbls) of crude oil and 2.2 bbls of produced water. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; 18 bbls of crude oil and 2 bbls were recovered. XTO reported the release to NMOCD on a Release Notification Form C-141 (Form C-141) on December 4, 2018. The release was assigned Incident Number NAB1834656162.

XTO retained LT Environmental, Inc. (LTE) to assess and remediate the Site. Between January and February 2019, three areas around production equipment were excavated to the maximum extent practicable (MEP), which resulted in the excavation of approximately 500 cubic yards of impacted soil in aggregate. Due to the presence of production equipment and XTO's safety policy regarding excavation of soil within 2 feet of production equipment and tanks, approximately 300 cubic yards of residually impacted soil was left in-place until the Site had major reconstruction and/or the well pad was plugged and abandoned and the production equipment was moved for reclamation, allowing for the impacted soil to be accessible. XTO submitted the *Closure Request* on February 28, 2019. The conclusions of the *Closure Request* were agreed to by NMOCD on March 18, 2019. The *Closure Request* is included in Appendix A.

XTO Energy Inc
Closure Request
Poker Lake Unit #420 Battery

XTO has plugged and abandoned the production well and has removed all equipment in preparation for reclamation of the well pad. As such, the deferred areas could safely be accessible to remediate residual total petroleum hydrocarbon (TPH) impacted soil. Results of the additional remedial actions are described below. All previous documentation related to Incident Number NAB1834656162 is available on NMOCD's web portal.

CLOSURE CRITERIA

The Site was characterized to determine the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization based on the results of the Site Characterization presented in the original *Closure Request*, approved by NMOCD on March 18, 2019, 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
- 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 applies to the top 4 feet of the off pad area that was impacted by the release, per 19.15.29.13.D (1) NMAC for the top 4 feet of areas that will be reclaimed following remediation.

EXCAVATION ACTIVITIES

Between March 21 and April 26, 2023, Ensolum personnel oversaw excavation activities in the vicinity of previously collected sidewall soil samples SW06 and SW09 through SW11 as well as floor soil samples FS14 and FS15, which contained residually elevated TPH concentrations, within the previous three excavation extents. Excavation activities were performed by use of heavy equipment and directed by field screening soil for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. Photographic documentation of excavation activities is included in Appendix B.

In general, the excavations were completed to depths ranging from 3 feet to 4 feet below ground surface (bgs) and the total combined areal extent of the three excavations was 8,261 square feet. Following removal of soil, Ensolum personnel collected 5-point composite soil samples representing up to 200 square feet from the floor and/or sidewall of the three excavations. 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. Ensolum collected a total of 51 floor soil samples and 20 sidewall soil samples.

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 (COC): BTEX following United States Environmental

XTO Energy Inc
Closure Request
Poker Lake Unit #420 Battery

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 indicated all COCs in all floor soil samples were compliant with the Closure Criteria and/or reclamation requirement with the exception of floor soil samples FS43, FS46, and FS48 through FS50. Those floor sample areas exceeding the Closure Criteria were excavated to a depth of 4 feet bgs and resampled, resulting in laboratory analytical results indicating compliance with the Closure Criteria for all subsequent soil samples.

Laboratory analytical results indicated all COCs in all sidewall soil samples were compliant with the Closure Criteria and/or reclamation requirement with the exception of sidewall soil samples SW12, SW16, and SW18 through SW20. Those sidewalls that exceeded the Closure Criteria and/or reclamation requirement were extended laterally and resampled, which resulted in all sidewall soil samples being compliant with the Closure Criteria and/or reclamation requirement.

The final excavation extents and excavation soil sample locations are presented on Figure 2. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix C.

The final excavation extents measured in total approximately 8,261 square feet. A total of approximately 1,070 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was transported and properly disposed of at the R360 Landfill Disposal Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation areas were secured with fencing.

CLOSURE REQUEST

Excavation activities were conducted at the Site to address residually impacted soil from the November 2018 release of crude oil and produced water on the well pad adjacent to production equipment. The production well has been plugged and abandoned and all production equipment has been removed, allowing for access to TPH-impacted soil to be excavated. Following excavation of the impacted soil in the vicinity of the three excavations, laboratory analytical results for all final confirmation soil samples indicated all COC concentrations were in compliance with the Closure Criteria and/or reclamation requirement. Based on the soil sample analytical results, no further remediation was required. The well pad is in the process of being reclaimed and the excavation areas will be backfilled with material purchased locally and the Site will be recontoured to match pre-existing Site conditions. The area will be reseeded utilizing a BLM-approved seed mixture for this area.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been determined to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. Based on initial response efforts, excavation of impacted soil, and soil sample laboratory analytical results compliant with the Closure Criteria, XTO respectfully requests closure for Incident Number NAB1834656162.

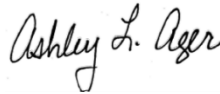
XTO Energy Inc
Closure Request
Poker Lake Unit #420 Battery

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

Sincerely,
Ensolum, LLC



Daniel R. Moir, PG
Senior Managing Geologist



Ashley L. Ager, MS, PG
Principal

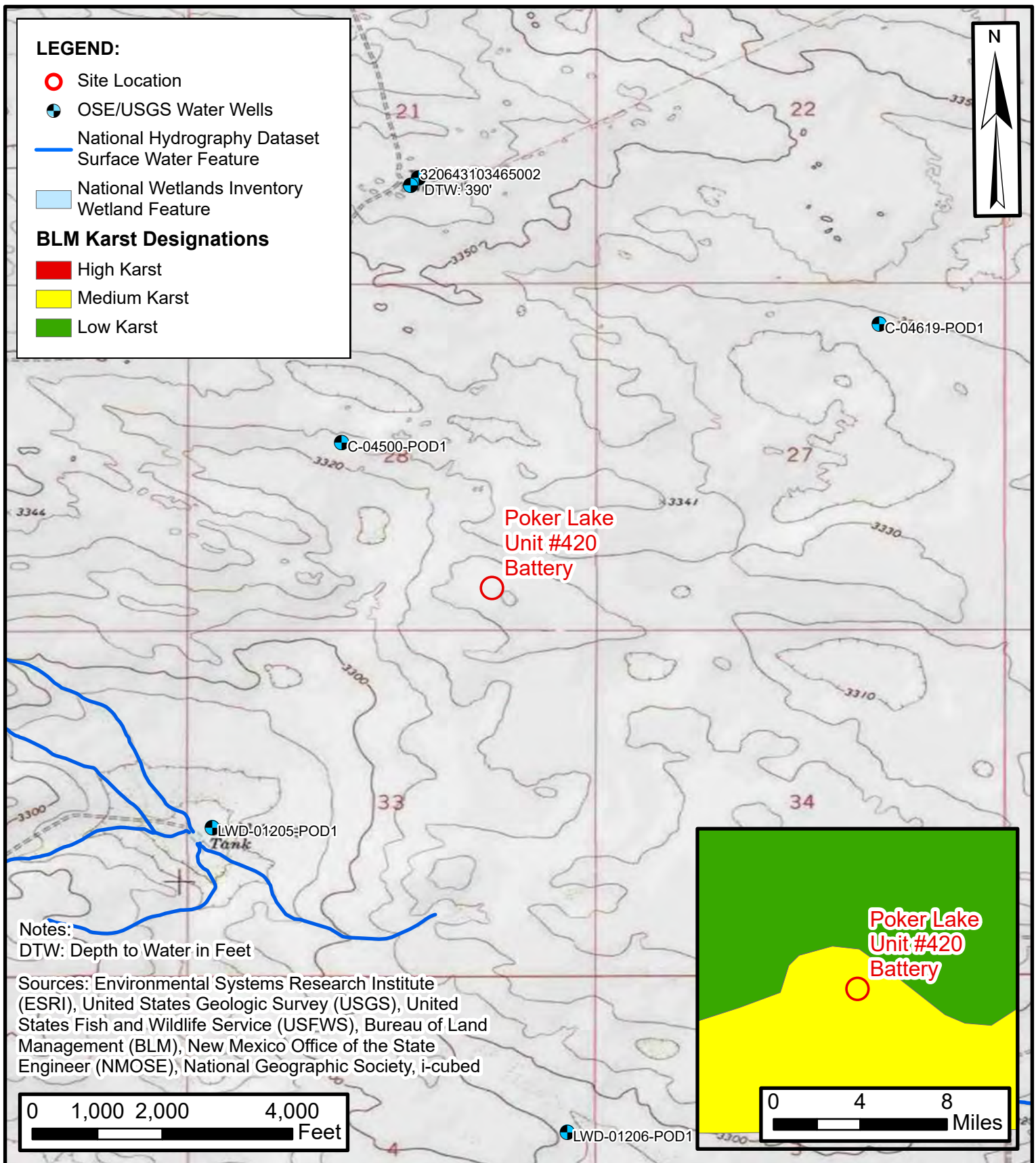
cc: Garrett Green, XTO
Shelby Pennington, XTO
BLM

Appendices:

Figure 1	Site Receptor Map
Figure 2	Excavation Soil Sample Locations
Table 1	Soil Sample Analytical Results
Appendix A	Closure Request, dated February 29, 2019
Appendix B	Photographic Log
Appendix C	Laboratory Analytical Reports & Chain-of-Custody Documentation
Appendix D	NMOCD Correspondence



FIGURES



Site Receptor Map

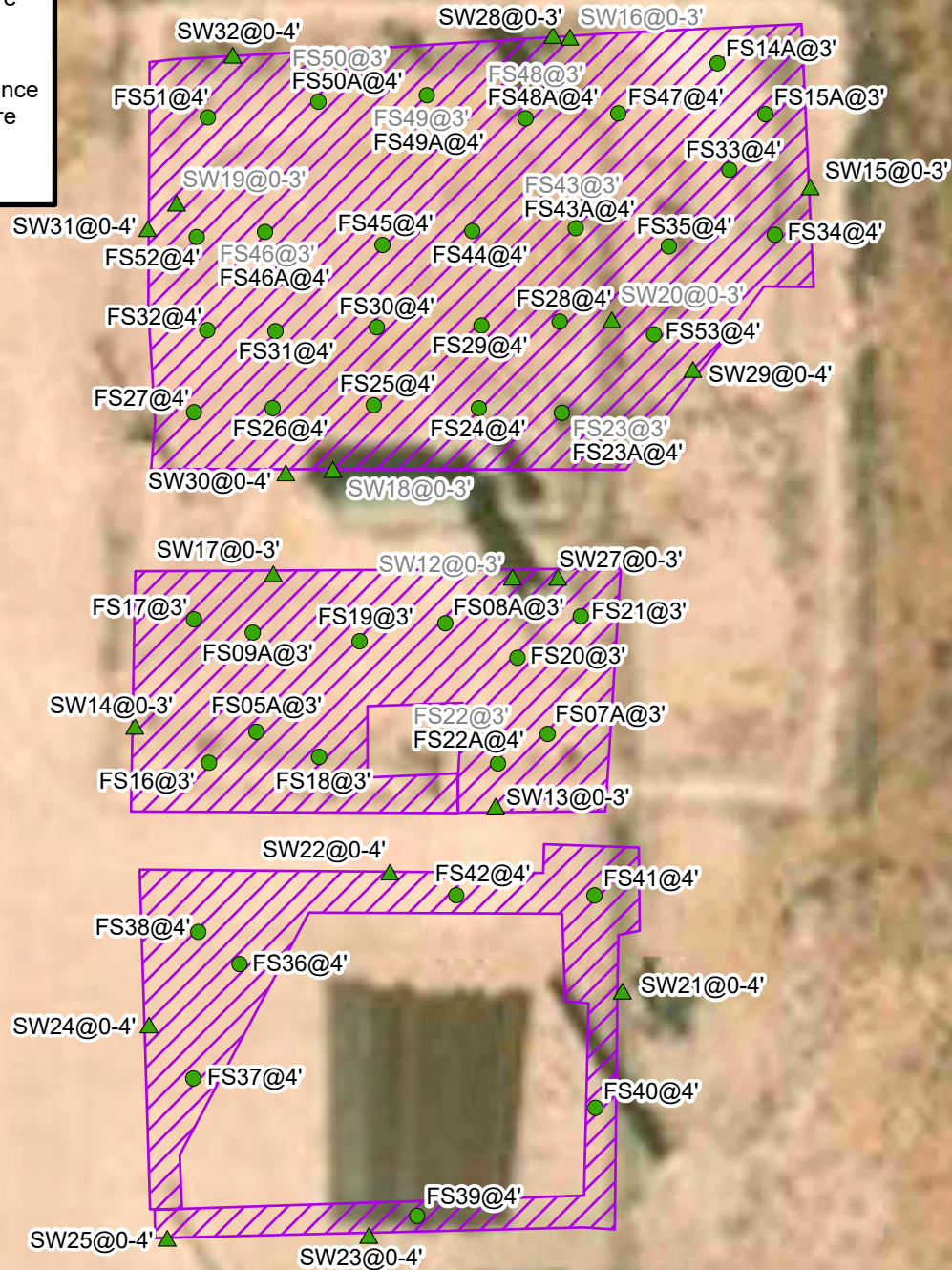
Poker Lake Unit #420 Battery
XTO Energy, Inc.
Incident number: NAB1834656162
Unit P, Sec 28, T25S, R31E
Eddy County, New Mexico

FIGURE

1

Legend

- ▲ Excavation Sidewall Samples in Compliance with NMOCD Closure Criteria
- Excavation Floor Samples in Compliance with NMOCD Closure Criteria
- ▨ Excavation Extent

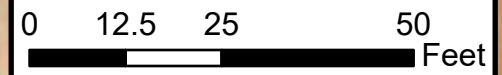


Notes:

Sample ID @ Depth Below Grade Surface in Feet

Sample ID in Grey Indicates Sample has been Excavated

NMOCD: New Mexico Oil Conservation Division



Sources: Environmental Systems Research Institute (ESRI), Maxar, Microsoft



Excavation Soil Sample Locations

Poker Lake Unit #420 Battery

XTO Energy, Inc.

Incident number: NAB1834656162

Unit P, Sec 28, T25S, R31E

Eddy County, New Mexico

FIGURE

2



TABLE

**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
POKER LAKE UNIT #420 BATTERY
XTO Energy, INC.
EDDY COUNTY, NEW MEXICO**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
Delineation Soil Samples										
PH10A	03/21/2023	1	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	255
Confirmation Sidewall Samples										
SW12	03/23/2023	0 - 3	<0.00201	<0.00402	<49.9	162	<49.9	162	162	598
SW13	03/23/2023	0 - 3	<0.00202	<0.00404	<49.9	78.9	<49.9	78.9	78.9	156
SW14	03/23/2023	0 - 3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	334
SW15	03/23/2023	0 - 3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	546
SW16	03/24/2023	0 - 3	<0.00201	<0.00402	<50.0	500	<50.0	500	500	201
SW17	03/27/2023	0 - 3	<0.00203	<0.00406	<49.8	<49.8	<49.8	<49.8	<49.8	110
SW18	03/27/2023	0 - 3	<0.00201	<0.00402	<49.9	209	<49.9	209	209	561
SW19	03/27/2023	0 - 3	<0.00200	<0.00401	<49.9	178	<49.9	178	178	592
SW20	03/27/2023	0 - 3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	701
SW21	03/27/2023	0 - 4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	74.5
SW22	03/27/2023	0 - 4	<0.00200	<0.00399	<50.0	78.0	<50.0	78.0	78.0	451
SW23	03/27/2023	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	42.8
SW24	03/28/2023	0 - 4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	84.5
SW25	03/29/2023	0 - 4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	63.5
SW27	04/25/2023	0 - 3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	343
SW28	04/25/2023	0 - 3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	180
SW29	04/26/2023	0 - 4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	369
SW30	04/26/2023	0 - 4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	184
SW31	04/26/2023	0 - 4	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	446
SW32	04/26/2023	0 - 4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	170
Confirmation Floor Samples										
FS05A	03/23/2023	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	171
FS07A	03/22/2023	3	<0.00201	<0.00201	<49.9	<49.9	<49.9	<49.9	<49.9	106
FS08A	03/23/2023	3	<0.00202	<0.00403	<49.8	<49.8	<49.8	<49.8	<49.8	183
FS09A	03/23/2023	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	244
FS14A	03/23/2023	3	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	227
FS15A	03/23/2023	3	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	500
FS16	03/23/2023	3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	64.8
FS17	03/23/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	265

**TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
POKER LAKE UNIT #420 BATTERY
XTO Energy, INC.
EDDY COUNTY, NEW MEXICO**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCB Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS18	03/23/2023	3	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	142
FS19	03/23/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	343
FS20	03/23/2023	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	93.6
FS21	03/27/2023	3	<0.00199	<0.00398	<49.9	56.4	<49.9	56.4	56.4	135
FS22	03/27/2023	3	<0.00199	<0.00398	<49.9	153	<49.9	153	153	750
FS22A	04/25/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	133
FS23	03/27/2023	3	<0.00201	<0.00402	<50.0	95.8	<50.0	95.8	95.8	749
FS23A	04/25/2023	4	<0.00199	<0.00398	<50.0	95.2	50.8	146	146	1,220
FS24	03/29/2023	4	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	1,640
FS25	03/29/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,330
FS26	03/29/2023	4	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	720
FS27	03/29/2023	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	979
FS28	03/29/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,310
FS29	03/29/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,270
FS30	03/29/2023	4	<0.00200	<0.00401	<49.9	50.8	<49.9	50.8	50.8	1,490
FS31	03/29/2023	4	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	1,300
FS32	03/29/2023	4	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	1,080
FS33	03/29/2023	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	880
FS34	03/29/2023	4	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	2,800
FS35	03/29/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,060
FS36	03/28/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	114
FS37	03/28/2023	4	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	75.2
FS38	03/28/2023	4	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	77.2
FS39	03/29/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	38.1
FS40	03/29/2023	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	80.1
FS41	03/29/2023	4	<0.00202	<0.00404	<49.9	66.8	<49.9	66.8	66.8	77.5
FS42	03/29/2023	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	109
FS43	03/29/2023	3	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	1,090
FS43A	04/25/2023	4	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	994
FS44	03/29/2023	4	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	861
FS45	03/29/2023	4	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	835
FS46	03/29/2023	3	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	884

TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
POKER LAKE UNIT #420 BATTERY
XTO Energy, INC.
EDDY COUNTY, NEW MEXICO

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table I Closure Criteria (NMAC 19.15.29)			10	50	NE	NE	NE	1,000	2,500	20,000
FS46A	04/26/2023	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	274
FS47	03/29/2023	3	<0.00200	<0.00399	<50.0	64.8	<50.0	64.8	64.8	539
FS48	03/29/2023	3	<0.00199	<0.00398	<49.9	499	<49.9	499	499	677
FS48A	04/26/2023	4	<0.00201	<0.00402	<49.9	228	<49.9	228	228	751
FS49	03/29/2023	3	<0.00199	<0.00398	<49.9	154	<49.9	154	154	304
FS49A	04/26/2023	4	<0.00202	<0.00404	<49.8	<49.8	<49.8	<49.8	<49.8	473
FS50	03/29/2023	3	<0.00200	<0.00401	<50.0	415	<50.0	415	415	351
FS50A	04/26/2023	4	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	356
FS51	04/26/2023	4	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	956
FS52	04/26/2023	4	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	532
FS53	04/26/2023	4	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	1,040

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

Closure Request dated February 29, 2019



LT Environmental, Inc.

3300 North "A" Street
Building 1, Unit 103
Midland, Texas 79705
432.704.5178

February 28, 2019

Mr. Mike Bratcher
New Mexico Oil Conservation Division
811 South First Street
Artesia, New Mexico 88210**RE: Closure Request
Poker Lake Unit #420 Battery
Remediation Permit Number 2RP-5102
Eddy County, New Mexico**

Dear Mr. Bratcher:

LT Environmental, Inc. (LTE), on behalf of XTO Energy, Inc. (XTO), presents the following report detailing delineation soil sampling and excavation activities at the Poker Lake Unit #420 Battery (Site) in Unit P, Section 28, Township 25 South, Range 31 East, in Eddy County, New Mexico (Figure 1). The purpose of the soil sampling and excavation activities was to address impact to soil after a heater-treater gasket failed, causing crude oil and produced water to release onto the surface of the pad in the process equipment area. The release was discovered on November 19, 2018. Approximately 19.5 barrels (bbls) of crude oil and 2.2 bbls of produced water were released. The gasket was repaired, and vacuum trucks were dispatched to the Site to recover the free-standing fluid. Approximately 18 bbls of crude oil and 2 bbls of produced water were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification and Corrective Action Form C-141 on December 4, 2018, and was assigned Remediation Permit (RP) Number 2RP-5102 (Attachment 1).

BACKGROUND

The release occurred after August 14, 2018; therefore, LTE applied Table 1, the *Closure Criteria for Soils Impacted by a Release*, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest water well data. The nearest permitted water well with depth to groundwater data is United States Geological Survey well 320643103465002 25S.31E.21.413314A, located approximately 1.17 miles north of the Site, with a depth to groundwater of 318 feet bgs and a total depth of 400 feet bgs. The elevation of the water well is approximately 26 feet higher than the Site. The closest surface water to the Site is an unnamed dry wash located approximately 0.99 miles southwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a





subsurface mine. Based on these criteria, the following NMOCD Table 1 closure criteria apply: 10 milligrams per kilogram (mg/kg) benzene; 50 mg/kg total benzene, toluene, ethylbenzene, and total xylenes (BTEX); 2,500 mg/kg total petroleum hydrocarbons (TPH); 1,000 mg/kg TPH-gasoline range organics (GRO) and TPH-diesel range organics (DRO); and 20,000 mg/kg chloride.

PRELIMINARY SOIL SAMPLING

On November 27, 2018, LTE personnel inspected the Site to evaluate the release extent. Surface hydrocarbon staining was observed in the release area. The release extent was mapped using a handheld Global Positioning System (GPS) unit and is depicted on Figure 2. LTE personnel collected six preliminary soil samples (SS01 through SS06) within the release area from a depth of 0.5 feet bgs to assess the lateral extent of soil impacts. The soil samples were screened for volatile aromatic hydrocarbons and chlorides using a photo-ionization detector (PID) and Hach® chloride QuanTab® test strips. The soil samples were placed directly into pre-cleaned glass jars, labeled with the sample location, date, time, sampler, method of analysis, and immediately placed on ice. The soil samples were shipped at 4 degrees Celsius (°C) under strict chain-of-custody procedures to Xenco Laboratories, Inc. (Xenco) in Midland, Texas, for analysis of BTEX by United States Environmental Protection Agency (USEPA) Method 8021B, TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) by USEPA Method 8015M/D, and chloride by USEPA Method 300.0.

Laboratory analytical results for soil samples SS01, SS02, and SS04 indicated that BTEX, GRO/DRO, and TPH concentrations exceeded the NMOCD Table 1 closure criteria; soil sample SS03 exceeded the NMOCD Table 1 closure criteria for GRO/DRO; and soil sample SS05 exceeded the NMOCD Table 1 closure criteria for BTEX, GRO/DRO, TPH, and chloride. Laboratory analytical results for soil sample SS06 indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results are presented on Figure 2 and summarized in Table 1, and the laboratory analytical report is included in Attachment 2. Based on the soil sample analytical results, excavation of impacted soil was required.

DELINEATION ACTIVITIES

During January and February 2019, LTE personnel returned to the Site to oversee potholing and excavation activities. Potholes PH01 through PH12 were advanced in the release area using a hydrovacuum and track hoe to further delineate the lateral and vertical extent of impacted soil and help guide excavation activities. Soil was field screened in each pothole using a PID and Hach® chloride QuanTab® test strips. Two delineation soil samples were collected from each pothole PH01 through PH10. Soil samples were collected from depths ranging from 1 foot to 10 feet bgs in potholes PH01 through PH05. Soil samples were collected from the surface and from 1 foot bgs in potholes PH06 through PH10. One soil sample was collected from each pothole PH11 and PH12 from a depth of 4 feet and 4.5 feet bgs, respectively.





On February 19, 2019, LTE personnel returned to the Site to confirm the vertical and horizontal extent of impacted soil north of the pad. Three boreholes (BH13 through BH15) were advanced to a depth of 3 feet to 3.5 feet bgs using a hand auger. Soil was field screened in each borehole using a PID and Hach® chloride QuanTab® test strips. Two soil samples were collected from each borehole from a depth of 0.3 feet and a depth 3 feet or 3.5 feet bgs.

The pothole and borehole soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. The soil sample locations and depths are presented on Figure 3 and soil sample logs are included as Attachment 3.

Laboratory analytical results for pothole soil samples PH02, PH04, PH05, and PH07 indicated that TPH and/or GRO/DRO concentrations exceeded the NMOCD Table 1 closure criteria. Laboratory analytical results for all other pothole and borehole soil samples indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Laboratory analytical results are summarized in Table 1, and the laboratory analytical reports are included in Attachment 2.

EXCAVATION ACTIVITIES

During January and February 2019, LTE personnel was on site to oversee excavation activities as indicated by potholing and field screening activities, laboratory analytical results, and the documented release area. To direct excavation activities, LTE screened soil using a PID and Hach® chloride QuanTab® test strips. Due to the presence of active process equipment and pipelines in the release area, four separate excavations were completed. Excavation depths ranged from 2.5 feet to 4.5 feet bgs. Following removal of impacted soil to the extent possible, LTE collected 5-point composite soil samples every 200 square feet from the sidewalls and floor of each excavation. The 5-point composite soil samples were collected by depositing 5 aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing.

The northern excavation measured approximately 1,721 square feet in area with a depth of 2.5 feet bgs. Composite soil samples SW08 and SW09 were collected from the sidewalls of the excavation from the surface to a depth to 3 feet bgs. Composite soil samples FS10 through FS13 were collected from the floor of the excavation from a depth of 2.5 feet bgs.

The central excavation measured approximately 1,069 square feet in area with a depth of 2.5 feet bgs. Composite soil samples SW05 and SW06 were collected from the sidewalls of the excavation from the surface to a depth of 2.5 feet bgs. Composite soil samples FS05 through FS09 were collected from the floor of the excavation from a depth of 2.5 feet bgs.

The southern excavation measured approximately 1,871 square feet in area with a depth of 4 feet to 4.5 feet bgs. Composite soil samples SW01 through SW04, and SW07 were collected from the sidewalls of the excavation from the surface to a depth of 4 feet bgs. Composite soil





samples FS01 through FS04, and FS04A were collected from the floor of the excavation from depths of 4 feet to 4.5 feet bgs.

The smallest excavation in the northeastern corner of the pad measured approximately 263 square feet in area with a depth of 2.5 feet bgs. Composite soil samples SW10 and SW11 were collected from the sidewalls of the excavation from the surface to a depth of 2.5 feet bgs. Composite soil samples FS14 and FS15 were collected from the floor of the excavation from depths of 1 foot to 2.5 feet bgs.

All excavation soil samples were collected, handled, and analyzed as described above and submitted to Xenco in Midland, Texas. Approximately 500 cubic yards of impacted soil were removed from the excavations. The impacted soil was transported and properly disposed of at R360 Red Bluff Landfill Facility in Orla, Texas. The soil sample locations and depths are presented on Figure 4.

ANALYTICAL RESULTS

Laboratory analytical results exceeded the NMOCD Table 1 closure criteria in preliminary soil samples SS01 through SS05 and in potholes soil samples PH02, PH04, PH05, and PH07. The impacted soil was excavated to the extent possible and laboratory analytical results for excavation floor samples FS01 through FS03, FS04A, and FS05 through FS13 and excavation sidewall samples SW01 through SW03, SW05, SW07, and SW08 collected from the final excavation extents indicated that BTEX, TPH, and chloride concentrations were compliant with the NMOCD Table 1 closure criteria. Floor sample FS04 initially exceeded the NMOCD Table 1 closure criteria for GRO/DRO; additional soil was removed from the floor of the excavation and subsequent confirmation floor sample FS04A was compliant with the NMOCD Table 1 closure criteria. Sidewall sample SW04 initially exceeded the NMOCD Table 1 closure criteria for GRO/DRO; additional soil was removed from the sidewall of the excavation and subsequent confirmation sidewall sample SW07 was compliant with the NMOCD Table 1 closure criteria.

Laboratory analytical results for excavation floor samples FS14 and FS15 and excavation sidewall samples SW06 and SW09 through SW11 indicated that TPH and/or GRO/DRO exceeded the NMOCD Table 1 closure criteria. Further excavation of impacted soil was limited by active process equipment and pipelines. XTO safety policy restricts soil disturbing activities to a 2-foot radius of any on-site process equipment and pipelines. This XTO safety policy is established to protect workers and to reduce the likelihood of compromising the foundation of the process equipment. This policy was enforced where impacted soil was identified within two feet of active process equipment and/or pipelines in soil samples FS14, FS15, SW06, and SW09 through SW11. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included in Attachment 2.





Bratcher, M.
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CONCLUSIONS

A total of approximately 410 cubic yards of impacted soil were excavated from the Site; however, residual impacted soil was left in place for compliance with the XTO safety policy regarding earth-moving activities within 2-feet of active process equipment and pipelines. Laboratory analytical results for excavation sample SW09 collected from the sidewall of the northern excavation, excavation soil samples SW10, SW11, FS14, and FS15 collected from the northeast excavation, and excavation soil sample SW06 collected from the north wall of the central excavation, indicated that soil with TPH and/or DRO/GRO concentrations exceeding the NMOCD Table 1 closure criteria was left in place within two feet of active process equipment and pipelines. An estimated 400 cubic yards of impacted soil remain in place in the northeast corner of the pad, assuming a maximum 4-foot depth based on borehole samples BH13A through BH15A collected from 3 feet bgs that were compliant with the NMOCD Table 1 closure criteria. An estimated 300 cubic yards of impacted soil remain in place in the central excavation, assuming a maximum 3-foot depth based on floor samples FS07, FS08, FS10 and FS11 collected from 2.5 feet bgs that were compliant with the NMOCD Table 1 closure criteria.

XTO requests to backfill the existing excavations and complete remediation during any future major well pad construction/alteration or final plugging and abandonment, whichever occurs first. LTE and XTO do not believe deferment will result in imminent risk to human health, the environment, or groundwater. The majority of this release occurred within the process equipment berm and free-standing fluids were recovered during initial response activities. No saturated soil remains in place. The impacted soil remaining in place in the northeast corner is delineated vertically and laterally by samples collected from boreholes BH13 through BH15. The impacted soil remaining in place in the central excavation is delineated vertically and laterally by floor samples FS07, FS08, FS10 and FS11.

Initial response efforts and excavation of impacted soil have mitigated impacts at this Site. XTO requests no further action for this release. Upon approval of this closure request, XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing conditions. An updated NMOCD Form C-141 is included in Attachment 1. A photographic log of the Site is included in Attachment 4.

If you have any questions or comments, please do not hesitate to contact Ms. Adrian Baker at (432) 887-1255 or abaker@ltenv.com.





Bratcher, M.
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Sincerely,

LT ENVIRONMENTAL, INC.

A handwritten signature in blue ink that reads 'Adrian Baker'.

Adrian Baker
Project Geologist

A handwritten signature in blue ink that reads 'Ashley L. Ager'.

Ashley L. Ager, P.G.
Senior Geologist

cc: Kyle Littrell, XTO
Jim Amos, BLM
Deborah McKinney, BLM

Attachments:

Figure 1 Site Location Map
Figure 2 Preliminary Soil Sample Locations
Figure 3 Delineation Soil Sample Locations
Figure 4 Excavation Soil Sample Locations
Table 1 Soil Analytical Results
Attachment 1 Initial/Final NMOCD Form C-141 (2RP-5102)
Attachment 2 Laboratory Analytical Reports
Attachment 3 Soil Sample Logs
Attachment 4 Photographic Log



FIGURES



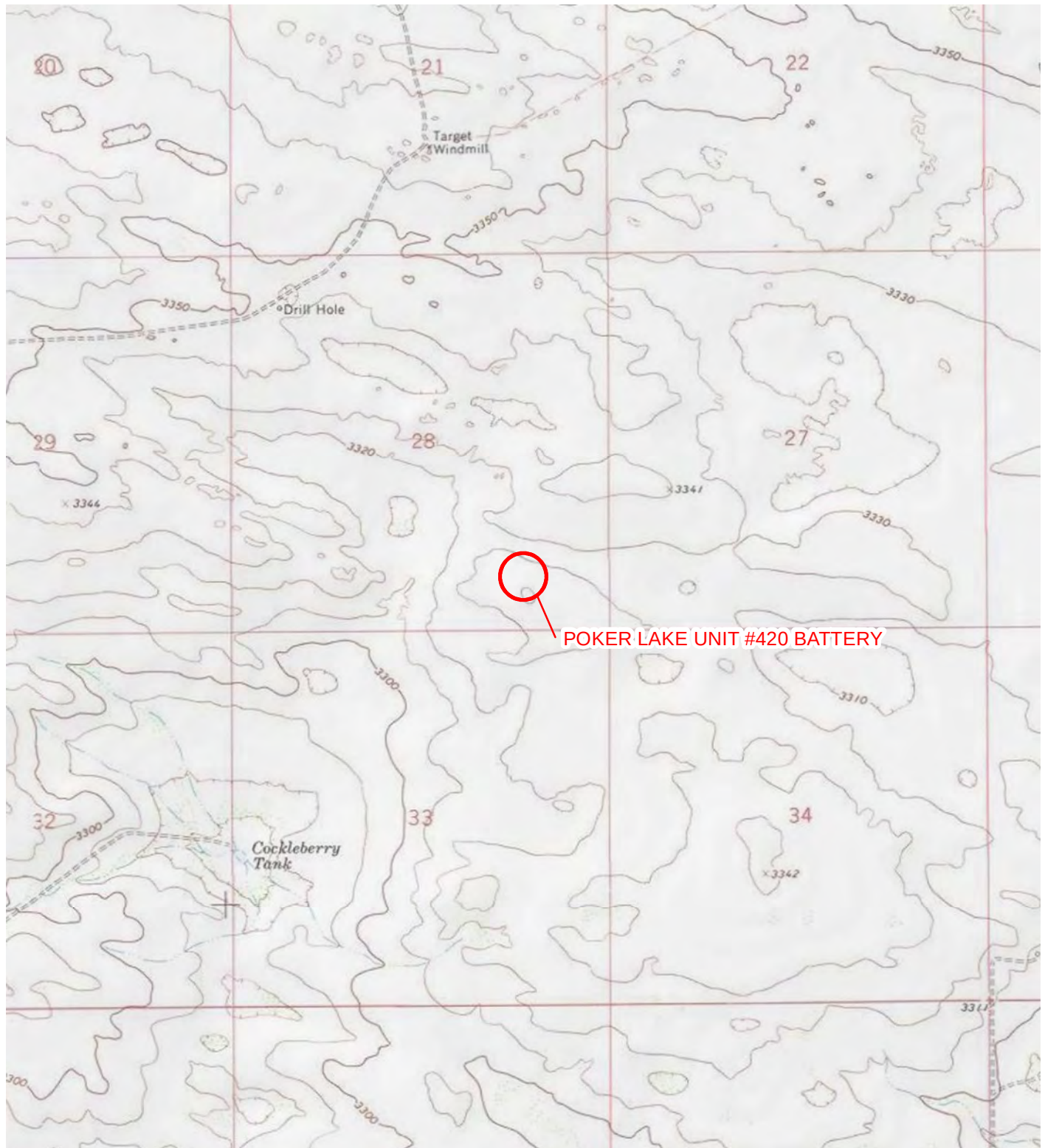
**LEGEND** SITE LOCATION

IMAGE COURTESY OF ESRI/USGS

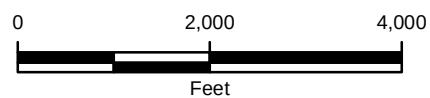
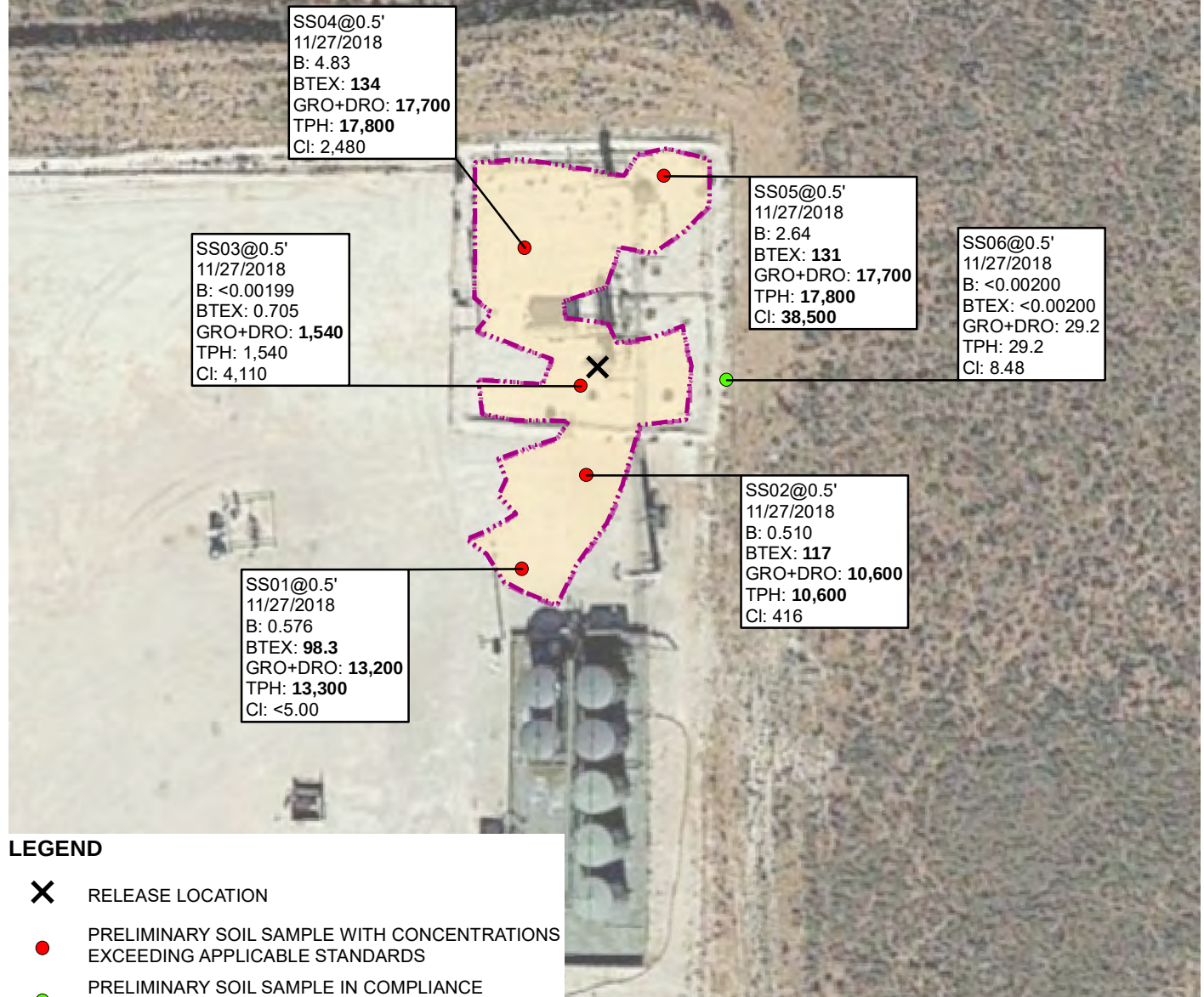
NOTE: REMEDIATION PERMIT
NUMBER 2RP-5102

FIGURE 1
SITE LOCATION MAP
POKER LAKE UNIT #420 BATTERY
UNIT P SEC 28 T25S R31E
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



P:\XTO Energy\GIS\MXD\012918193_PLU 420 BATTERY\012918193_FIG01_SL_2018_NA.mxd

SAMPLE ID@DEPTH BELOW GROUND SURFACE
 SAMPLE DATE
 NMOCD TABLE 1 CLOSURE CRITERIA (NMAC 19.15.29.12)
 B = 10 mg/kg
 BTEX = 50 mg/kg
 GRO+DRO = 1,000 mg/kg
 TPH = 2,500 mg/kg
 Cl = 20,000 mg/kg
 ALL RESULTS IN MILLIGRAMS PER KILOGRAM (mg/kg)
 <: INDICATES RESULT IS LESS THAN THE
 LABORATORY REPORTING LIMIT
BOLD: INDICATES RESULT EXCEEDS THE
 APPLICABLE STANDARD



LEGEND

- X** RELEASE LOCATION
- PRELIMINARY SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE STANDARDS
- PRELIMINARY SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS

RELEASE EXTENT

B: BENZENE
 BTEX: TOTAL BENZENE, TOLUENE, ETHYLBENZENE, AND TOTAL XYLENES
 GRO – GASOLINE RANGE ORGANICS
 DRO – DIESEL RANGE ORGANICS
 TPH – TOTAL PETROLEUM HYDROCARBONS
 Cl – CHLORIDE
 NMAC – NEW MEXICO ADMINISTRATIVE CODE
 NMOCD – NEW MEXICO OIL CONSERVATION DIVISION
 NOTE: REMEDIATION PERMIT NUMBER 2RP-5102

IMAGE COURTESY OF GOOGLE EARTH 2015

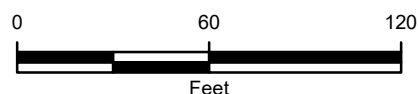


FIGURE 2
 PRELIMINARY SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT #420 BATTERY
 UNIT P SEC 28 T25S R31E
 EDDY COUNTY, NEW MEXICO
 XTO ENERGY, INC.



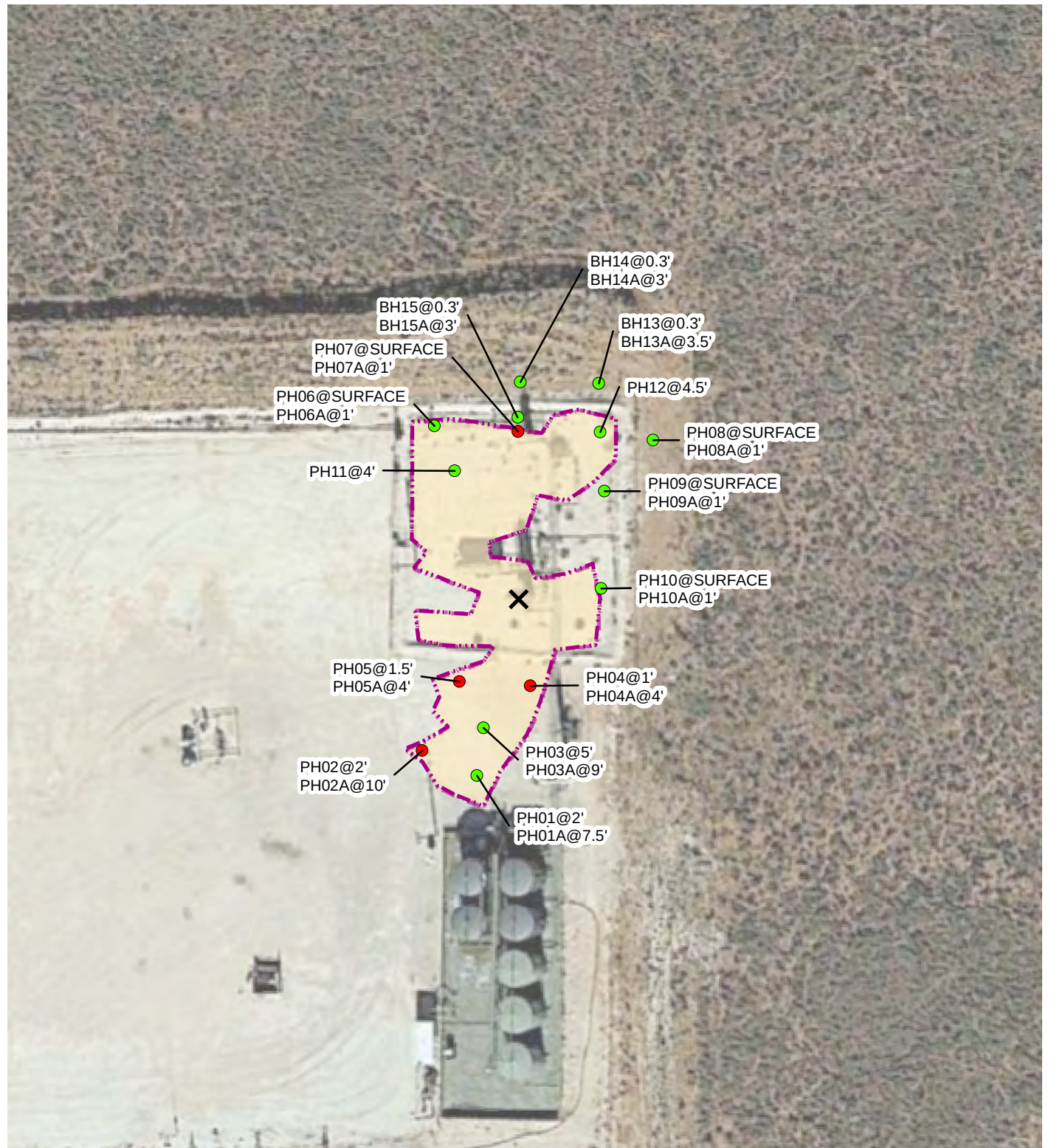


IMAGE COURTESY OF GOOGLE EARTH 2015

LEGEND

- DELINEATION SOIL SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE STANDARDS
- DELINEATION SOIL SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS
- X** RELEASE LOCATION
- RELEASE EXTENT

NOTE: REMEDIATION PERMIT NUMBER 2RP-5102

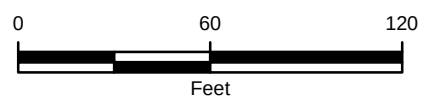
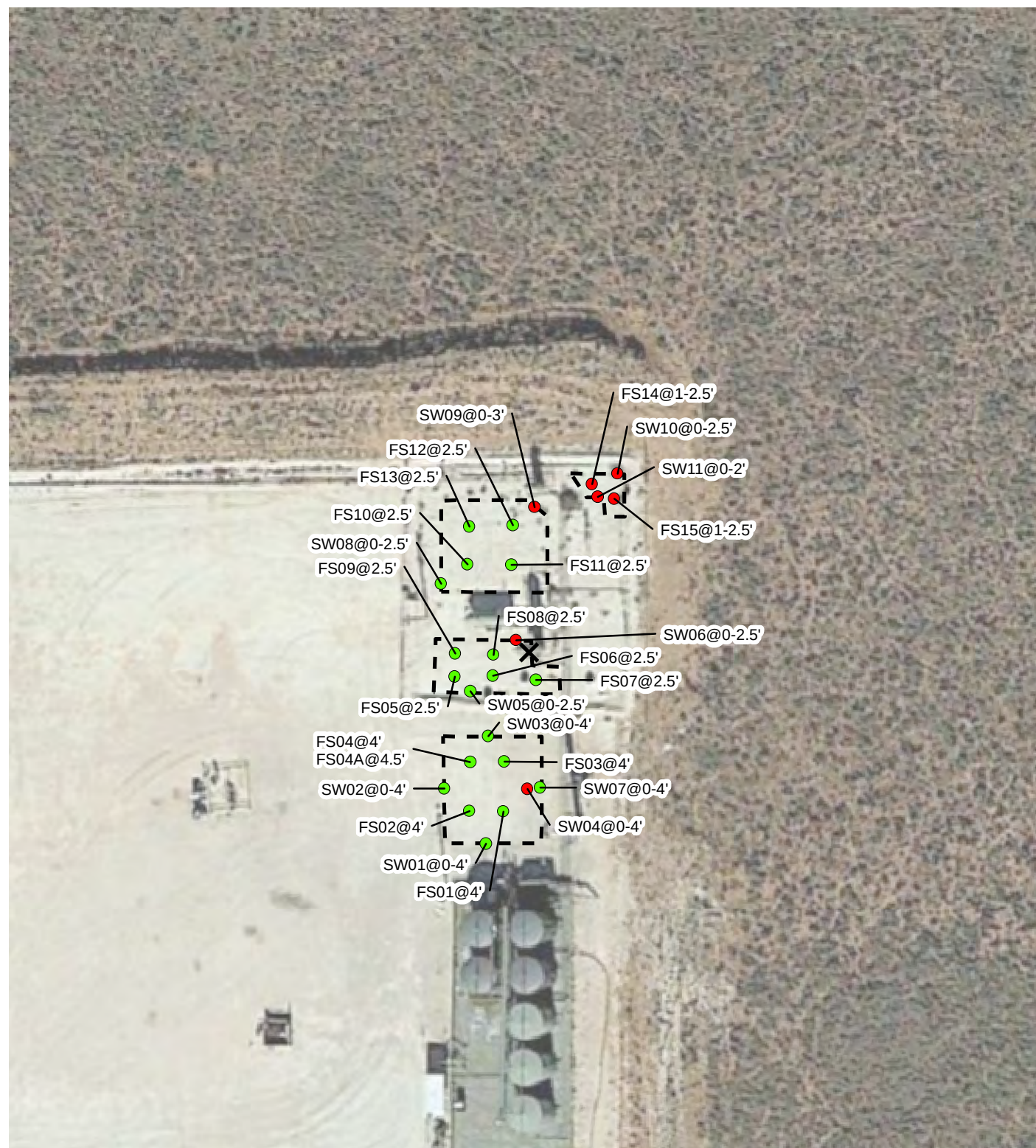


FIGURE 3
DELINEATION SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT #420 BATTERY
 UNIT P SEC 28 T25S R31E
 EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



P:\XTO Energy\GIS\IMXD\012918193_PLU 420 BATTERY\012918193_FIG03_DELINEATION SS_2018_5102_ND.mxd

**LEGEND**

- EXCAVATION SAMPLE WITH CONCENTRATIONS EXCEEDING APPLICABLE STANDARDS
- EXCAVATION SAMPLE IN COMPLIANCE WITH APPLICABLE STANDARDS
- X** RELEASE LOCATION
- EXCAVATION EXTENT

NOTE: REMEDIATION PERMIT NUMBER 2RP-5102

IMAGE COURTESY OF GOOGLE EARTH 2015

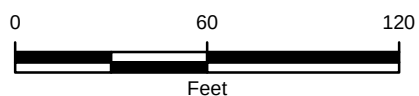


FIGURE 4
EXCAVATION SOIL SAMPLE LOCATIONS
 POKER LAKE UNIT #420 BATTERY
 UNIT P SEC 28 T25S R31E
 EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.



TABLES



**TABLE 1
SOIL ANALYTICAL RESULTS**

**POKER LAKE UNIT #420 BATTERY
REMEDIATION PERMIT NUMBER 2RP-5102
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.**

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SS01	0.5	11/27/2018	0.576	23.6	11.9	62.2	98.3	4,760	8,410	90.0	13,200	13,300	<5.00
SS02	0.5	11/27/2018	0.510	24.4	14.7	76.9	117	3,320	7,240	82.8	10,600	10,600	416
SS03	0.5	11/27/2018	<0.00199	0.0836	0.116	0.505	0.705	274	1,270	<15.0	1,540	1,540	4,110
SS04	0.5	11/27/2018	4.83	41.4	16.2	71.1	134	7,040	10,700	109	17,700	17,800	2,480
SS05	0.5	11/27/2018	2.64	33.8	15.1	79.2	131	5,510	12,200	131	17,700	17,800	38,500
SS06	0.5	11/27/2018	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	29.2	<15.0	29.2	29.2	8.48
PH01	2	01/25/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	18.6	<15.0	18.6	18.6	32.2
PH01A	7.5	01/25/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.99
PH02	2	01/25/2019	0.00474	0.0998	0.0193	0.144	0.268	154	993	149	1,150	1,300	<4.96
PH02A	10	01/25/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	8.52
PH03	5	01/25/2019	<0.00200	<0.00200	<0.00200	0.00205	0.00205	<15.0	219	36.8	219	256	15.7
PH03A	9	01/25/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	24.8	<15.0	24.8	24.8	29.8
PH04	1	01/25/2019	<0.00199	0.0431	0.0126	0.0890	0.145	247	1,960	300	2,210	2,510	1,460
PH04A	4	01/25/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	50.3
PH05	1.5	01/25/2019	0.00344	0.0994	0.0230	0.155	0.281	234	1,260	202	1,490	1,700	147
PH05A	4	01/25/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<4.95
FS01	4	01/30/2019	<0.00200	0.00246	<0.00200	<0.00200	0.00246	<15.0	<15.0	<15.0	<15.0	<15.0	254
FS02	4	01/30/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<14.9	<14.9	<14.9	<14.9	<14.9	<5.00
FS03	4	01/30/2019	<0.00200	0.0286	0.0311	0.189	0.249	58.0	559	103	617	720	325
FS04	4	01/30/2019	0.00529	0.112	0.0443	0.262	0.424	162	883	165	1,050	1,210	79.8
SW01	0 - 4	01/30/2019	<0.00200	0.0512	0.0520	0.328	0.431	76.3	583	103	659	762	770
SW02	0 - 4	01/30/2019	<0.00201	0.00675	0.0133	0.108	0.128	16.2	177	30.8	193	224	14.9
SW03	0 - 4	01/30/2019	<0.00200	0.0134	0.0404	0.242	0.296	26.3	388	63.8	414	478	243
SW04	0 - 4	01/30/2019	<0.00200	0.0308	0.0450	0.329	0.405	104	908	174	1,010	1,190	218
FS05	2.5	01/31/2019	<0.00201	<0.00201	0.0145	0.0485	0.0630	17.9	265	44.8	283	328	39.2
FS06	2.5	01/31/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	293
FS07	2.5	01/31/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	31.2	<15.0	31.2	31.2	1,030



TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT #420 BATTERY
REMEDIATION PERMIT NUMBER 2RP-5102
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
FS08	2.5	01/31/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	18.8	<15.0	18.8	18.8	664
FS09	2.5	01/31/2019	<0.00200	<0.00200	0.00945	0.0479	0.0574	15.6	157	22.8	173	195	1,520
SW05	0 - 2.5	01/31/2019	<0.00201	0.00595	0.0439	0.202	0.252	52.5	476	88.7	529	617	1,930
SW06	0 - 2.5	01/31/2019	0.0204	0.316	0.0859	0.640	1.06	392	1,160	184	1,550	1,740	5,700
FS04A	4.5	02/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	62.9	<15.0	62.9	62.9	10.9
FS10	2.5	02/05/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	15.4	<15.0	15.4	15.4	362
FS11	2.5	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	17.0	<14.9	17.0	17.0	1,390
FS12	2.5	02/05/2019	<0.00200	<0.00200	<0.00200	0.00805	0.00805	<15.0	52.4	<15.0	52.4	52.4	4,640
FS13	2.5	02/05/2019	0.108	0.475	5.67	1.36	7.62	31.4	171	18.7	202	221	35.2
PH06	Surface	02/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	39.8	15.9	39.8	55.7	<5.00
PH06A	1	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
PH07	Surface	02/05/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	1,070	417	1,070	1,490	138
PH07A	1	02/05/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<14.9	243	105	243	348	188
PH08	Surface	02/06/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	<14.9	<14.9	<14.9	<14.9	6.72
PH08A	1	02/06/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
PH09	Surface	02/05/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	41.1	<15.0	41.1	41.1	206
PH09A	1	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	1,100
PH10	Surface	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	79.9	16.6	79.9	96.5	179
PH10A	1	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<14.9	101	20.0	101	121	155
PH11	4	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	118
PH12	4.5	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	877
SW07	0 - 4	02/05/2019	<0.00200	<0.00200	<0.00200	0.00428	0.00428	<15.0	197	39.6	197	237	771
SW08	0 - 2.5	02/05/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	60.2	<15.0	60.2	60.2	818
SW09	0 - 3	02/05/2019	0.0653	0.656	0.615	3.91	5.25	822	3,480	449	4,300	4,750	5,650
FS14	1 - 2.5	02/06/2019	0.243	5.70	3.68	20.0	29.6	1,420	4,280	487	5,700	6,190	15,600
FS15	1 - 2.5	02/06/2019	0.140	1.89	5.11	7.68	14.8	403	1,550	214	1,950	2,170	9,730
SW10	0 - 2.5	02/06/2019	0.152	5.92	5.28	28.7	40.1	2,350	8,190	1,100	10,500	11,600	5,120



TABLE 1 (Continued)
SOIL ANALYTICAL RESULTS

POKER LAKE UNIT #420 BATTERY
REMEDIATION PERMIT NUMBER 2RP-5102
EDDY COUNTY, NEW MEXICO
XTO ENERGY, INC.

Sample Name	Sample Depth (feet bgs)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Total BTEX (mg/kg)	C6-C10 GRO (mg/kg)	C10-C28 DRO (mg/kg)	C28-C40 ORO (mg/kg)	GRO and DRO (mg/kg)	TPH (mg/kg)	Chloride (mg/kg)
SW11	0 - 2	02/06/2019	0.467	14.8	10.3	52.7	78.3	2,170	6,970	994	9,140	10,100	5,140
BH13	0.3	02/19/2019	<0.00202	<0.00202	<0.00202	<0.00202	<0.00202	<15.0	<15.0	<15.0	<15.0	<15.0	<4.96
BH13A	3.5	02/19/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<4.96
BH14	0.3	02/19/2019	<0.00201	<0.00201	<0.00201	<0.00201	<0.00201	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
BH14A	3	02/19/2019	<0.00199	<0.00199	<0.00199	<0.00199	<0.00199	<15.0	<15.0	<15.0	<15.0	<15.0	<5.00
BH15	0.3	02/19/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	19.2	<15.0	19.2	19.2	10.8
BH15A	3	02/19/2019	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<15.0	<15.0	<15.0	<15.0	<15.0	25.9
NMOCD Table 1 Closure Criteria			10	NE	NE	NE	50	NE	NE	NE	1,000	2,500	20,000

Notes:

bgs - below ground surface

BTEX - benzene, toluene, ethylbenzene, and total xylenes

mg/kg - milligrams per kilogram

NE - not established

NMOCD - New Mexico Oil Conservation Division

DRO - diesel range organics

GRO - gasoline range organics

ORO - oil range organics

TPH - total petroleum hydrocarbons

< - indicates result is below laboratory reporting limits

Bold- indicates result exceeds the applicable regulatory standard

* - indicates sample was collected in area to be reclaimed after remediation is complete; closure criteria for chloride concentration in the top 4 feet of soil is 600 mg/kg

Table 1 - closure criteria for soils impacted by a release per NMAC 19.15.29 August 2018

NMAC - New Mexico Administrative Code



ATTACHMENT 1: INITIAL/FINAL NMOC FORM C-141 (2RP-5102)



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

State of New Mexico
Energy Minerals and Natural
Resources Department

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

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

Incident ID	NAB1834656162
District RP	2 2RP-5102
Facility ID	
Application ID	pAB1834654349

Release Notification

Responsible Party

Responsible Party	XTO Energy	OGRID	5380
Contact Name	Kyle Littrell	Contact Telephone	432-221-7331
Contact email	Kyle_Littrell@xtoenergy.com	Incident # (assigned by OCD)	NAB1834656162
Contact mailing address	522 W. Mermod, Carlsbad, NM 88220		

Location of Release Source

Latitude 32.096080° Longitude -103.778375°
(NAD 83 in decimal degrees to 5 decimal places)

Site Name	Poker Lake Unit #420 Battery	Site Type	Bulk Storage and Separation Facility
Date Release Discovered	11/19/2018	API# (if applicable)	30-015-39795

Unit Letter	Section	Township	Range	County
P	28	25S	31E	Eddy

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

Nature and Volume of Release

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

☒ Crude Oil	Volume Released (bbls) 19.5	Volume Recovered (bbls) 18
☒ Produced Water	Volume Released (bbls) 2.2	Volume Recovered (bbls) 2
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	☐ Yes ☐ No
☐ Condensate	Volume Released (bbls)	Volume Recovered (bbls)
☐ Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
☐ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)

Cause of Release

Fluids were released to the well pad from the heater treater when a gasket failed. A vacuum truck recovered free standing fluids and the gasket was repaired. An environmental contractor has been retained to assist with remediation efforts.

Incident ID	NAB1834654349
District RP	2 2RP-5102
Facility ID	
Application ID	pAB1834654349

Was this a major release as defined by 19.15.29.7(A) NMAC?

☐ Yes ☒ No

If YES, for what reason(s) does the responsible party consider this a major release?
N/A

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
N/A

Initial Response

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

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

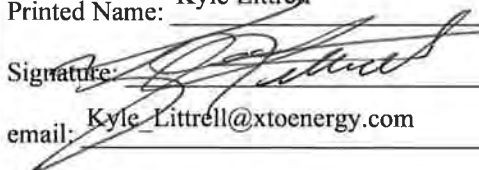
If all the actions described above have not been undertaken, explain why:

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

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

Printed Name: Kyle Littrell

Title: SH&E Coordinator

Signature: 

Date: 12-4-18

email: Kyle.Littrell@xtoenergy.com

Telephone: 432-221-7331

OCD Only

Received by: 

Date: 12/12/18

Incident ID	Page 306 of 557
District RP	2 2RP-5102
Facility ID	
Application ID	pAB1834654349

Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

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

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

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

- ☒ Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.
- ☒ Field data
- ☒ Data table of soil contaminant concentration data
- ☒ Depth to water determination
- ☒ Determination of water sources and significant watercourses within 1/2-mile of the lateral extents of the release
- ☒ Boring or excavation logs
- ☒ Photographs including date and GIS information
- ☒ Topographic/Aerial maps
- ☒ Laboratory data including chain of custody

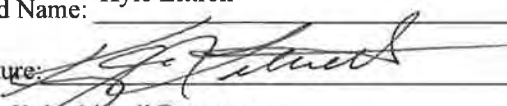
If the site characterization report does not include completed efforts at remediation of the release, the report must include a proposed remediation plan. That plan must include the estimated volume of material to be remediated, the proposed remediation technique, proposed sampling plan and methods,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

Incident ID	Page 307 of 537
District RP	2 2RP-5102
Facility ID	
Application ID	pAB1834654349

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

Printed Name: Kyle Littrell

Title: SH&E Coordinator

Signature: 

Date: 12-4-18

email: Kyle.Littrell@xtoenergy.com

Telephone: 432-221-7331

OCD OnlyReceived by: 

Date: 12/12/2018

Form C-141

State of New Mexico

Page 6

Oil Conservation Division

Incident ID	
District RP	2RP-5102
Facility ID	
Application ID	

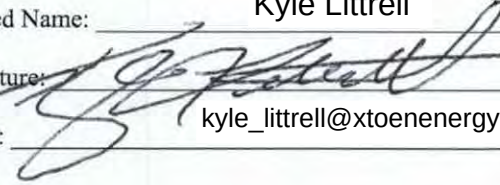
Closure

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

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

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

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

Printed Name: Kyle Littrell Title: SH&E Coordinator
Signature:  Date: 2-28-19
email: kyle_littrell@xtoenenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

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

Closure Approved by: _____ Date: _____

Printed Name: _____ Title: _____

Form C-141

State of New Mexico

Page 5

Oil Conservation Division

Incident ID	
District RP	2RP-5102
Facility ID	
Application ID	

Remediation Plan

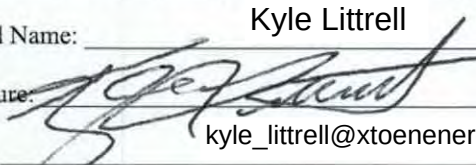
Remediation Plan Checklist: *Each of the following items must be included in the plan.*

- ☐ Detailed description of proposed remediation technique
- ☐ Scaled sitemap with GPS coordinates showing delineation points
- ☐ Estimated volume of material to be remediated
- ☐ Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- ☐ Proposed schedule for remediation (note if remediation plan timeline is more than 90 days OCD approval is required)

Deferral Requests Only: *Each of the following items must be confirmed as part of any request for deferral of remediation.*

- ☒ Contamination must be in areas immediately under or around production equipment where remediation could cause a major facility deconstruction.
- ☒ Extents of contamination must be fully delineated.
- ☒ Contamination does not cause an imminent risk to human health, the environment, or groundwater.

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

Printed Name: Kyle Littrell Title: SH&E Coordinator
Signature:  Date: 2-28-19
email: kyle_littrell@xtoenergy.com Telephone: 432-221-7331

OCD Only

Received by: _____ Date: _____

☐ Approved ☐ Approved with Attached Conditions of Approval ☐ Denied ☐ Deferral Approved

Signature: _____ Date: _____

ATTACHMENT 2: LABORATORY ANALYTICAL REPORTS



Analytical Report 606837

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420

06-DEC-18

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



06-DEC-18

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **606837**
PLU 420
Project Address:

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 606837. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 606837 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 606837****LT Environmental, Inc., Arvada, CO**

PLU 420

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
SS01	S	11-27-18 16:00	0.5 ft	606837-001
SS02	S	11-27-18 16:05	0.5 ft	606837-002
SS03	S	11-27-18 16:15	0.5 ft	606837-003
SS04	S	11-27-18 16:20	0.5 ft	606837-004
SS05	S	11-27-18 16:30	0.5 ft	606837-005
SS06	S	11-27-18 16:40	0.5 ft	606837-006



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420

Project ID:
Work Order Number(s): 606837

Report Date: 06-DEC-18
Date Received: 11/29/2018

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3071195 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 606837-001,606837-005,606837-004,606837-002.

Batch: LBA-3071866 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 606837-005,606837-002.

Batch: LBA-3071910 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 606837-003.



Certificate of Analysis Summary 606837

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420

Project Id:

Contact: Adrian Baker

Project Location:

Date Received in Lab: Thu Nov-29-18 11:37 am

Report Date: 06-DEC-18

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	606837-001	606837-002	606837-003	606837-004	606837-005	606837-006
	<i>Field Id:</i>	SS01	SS02	SS03	SS04	SS05	SS06
	<i>Depth:</i>	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft	0.5- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Nov-27-18 16:00	Nov-27-18 16:05	Nov-27-18 16:15	Nov-27-18 16:20	Nov-27-18 16:30	Nov-27-18 16:40
BTEX by EPA 8021B	<i>Extracted:</i>	Dec-06-18 09:00	Dec-06-18 09:00	Dec-05-18 16:00	Dec-06-18 09:00	Dec-06-18 09:00	Dec-06-18 09:00
	<i>Analyzed:</i>	Dec-06-18 13:48	Dec-06-18 13:25	Dec-06-18 14:51	Dec-06-18 16:16	Dec-06-18 14:09	Dec-06-18 12:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		0.576 0.503	0.510 0.398	<0.00199 0.00199	4.83 2.00	2.64 0.501	<0.00200 0.00200
Toluene		23.6 0.503	24.4 0.398	0.0836 0.00199	41.4 2.00	33.8 0.501	<0.00200 0.00200
Ethylbenzene		11.9 0.503	14.7 0.398	0.116 0.00199	16.2 2.00	15.1 0.501	<0.00200 0.00200
m,p-Xylenes		46.1 1.01	55.8 0.797	0.342 0.00398	53.8 4.00	58.0 1.00	<0.00399 0.00399
o-Xylene		16.1 0.503	21.1 0.398	0.163 0.00199	17.3 2.00	21.2 0.501	<0.00200 0.00200
Total Xylenes		62.2 0.503	76.9 0.398	0.505 0.00199	71.1 2.00	79.2 0.501	<0.00200 0.00200
Total BTEX		98.3 0.503	117 0.398	0.705 0.00199	134 2.00	131 0.501	<0.00200 0.00200
Inorganic Anions by EPA 300	<i>Extracted:</i>	Dec-03-18 08:00	Dec-03-18 08:00	Dec-03-18 08:00	Dec-03-18 08:00	Dec-03-18 08:00	Dec-03-18 08:00
	<i>Analyzed:</i>	Dec-03-18 10:52	Dec-03-18 10:58	Dec-03-18 11:05	Dec-03-18 11:29	Dec-03-18 11:36	Dec-03-18 11:54
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.00 5.00	416 5.00	4110 25.0	2480 24.9	38500 250	8.48 4.97
TPH by SW8015 Mod	<i>Extracted:</i>	Nov-29-18 16:00	Nov-29-18 16:00	Nov-29-18 16:00	Nov-29-18 16:00	Nov-29-18 16:00	Nov-29-18 16:00
	<i>Analyzed:</i>	Nov-30-18 03:46	Nov-30-18 04:05	Nov-30-18 04:24	Nov-30-18 04:43	Nov-30-18 05:02	Nov-30-18 05:21
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		4760 74.9	3320 74.7	274 15.0	7040 74.8	5510 74.9	<15.0 15.0
Diesel Range Organics (DRO)		8410 74.9	7240 74.7	1270 15.0	10700 74.8	12200 74.9	29.2 15.0
Motor Oil Range Hydrocarbons (MRO)		90.0 74.9	82.8 74.7	<15.0 15.0	109 74.8	131 74.9	<15.0 15.0
Total TPH		13300 74.9	10600 74.7	1540 15.0	17800 74.8	17800 74.9	29.2 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS01**
Lab Sample Id: 606837-001

Matrix: Soil
Date Collected: 11.27.18 16.00

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3071530

Date Prep: 12.03.18 08.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	12.03.18 10.52	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3071195

Date Prep: 11.29.18 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	4760	74.9	mg/kg	11.30.18 03.46		5
Diesel Range Organics (DRO)	C10C28DRO	8410	74.9	mg/kg	11.30.18 03.46		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	90.0	74.9	mg/kg	11.30.18 03.46		5
Total TPH	PHC635	13300	74.9	mg/kg	11.30.18 03.46		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	128	%	70-135	11.30.18 03.46	
o-Terphenyl	84-15-1	220	%	70-135	11.30.18 03.46	**



Certificate of Analytical Results 606837

LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS01**
 Lab Sample Id: 606837-001

Matrix: Soil
 Date Collected: 11.27.18 16.00

Date Received: 11.29.18 11.37
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 12.06.18 09.00

Basis: Wet Weight

Seq Number: 3071866

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.576	0.503	mg/kg	12.06.18 13.48		250
Toluene	108-88-3	23.6	0.503	mg/kg	12.06.18 13.48		250
Ethylbenzene	100-41-4	11.9	0.503	mg/kg	12.06.18 13.48		250
m,p-Xylenes	179601-23-1	46.1	1.01	mg/kg	12.06.18 13.48		250
o-Xylene	95-47-6	16.1	0.503	mg/kg	12.06.18 13.48		250
Total Xylenes	1330-20-7	62.2	0.503	mg/kg	12.06.18 13.48		250
Total BTEX		98.3	0.503	mg/kg	12.06.18 13.48		250
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	109	%	70-130	12.06.18 13.48		
1,4-Difluorobenzene	540-36-3	70	%	70-130	12.06.18 13.48		



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS02**
Lab Sample Id: 606837-002

Matrix: Soil
Date Collected: 11.27.18 16.05

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3071530

Date Prep: 12.03.18 08.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	416	5.00	mg/kg	12.03.18 10.58		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3071195

Date Prep: 11.29.18 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	3320	74.7	mg/kg	11.30.18 04.05		5
Diesel Range Organics (DRO)	C10C28DRO	7240	74.7	mg/kg	11.30.18 04.05		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	82.8	74.7	mg/kg	11.30.18 04.05		5
Total TPH	PHC635	10600	74.7	mg/kg	11.30.18 04.05		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	114	%	70-135	11.30.18 04.05	
o-Terphenyl	84-15-1	198	%	70-135	11.30.18 04.05	**



Certificate of Analytical Results 606837

LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS02**
 Lab Sample Id: 606837-002

Matrix: Soil
 Date Collected: 11.27.18 16.05

Date Received: 11.29.18 11.37
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 12.06.18 09.00

Basis: Wet Weight

Seq Number: 3071866

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.510	0.398	mg/kg	12.06.18 13.25		200
Toluene	108-88-3	24.4	0.398	mg/kg	12.06.18 13.25		200
Ethylbenzene	100-41-4	14.7	0.398	mg/kg	12.06.18 13.25		200
m,p-Xylenes	179601-23-1	55.8	0.797	mg/kg	12.06.18 13.25		200
o-Xylene	95-47-6	21.1	0.398	mg/kg	12.06.18 13.25		200
Total Xylenes	1330-20-7	76.9	0.398	mg/kg	12.06.18 13.25		200
Total BTEX		117	0.398	mg/kg	12.06.18 13.25		200
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	155	%	70-130	12.06.18 13.25	**	
1,4-Difluorobenzene	540-36-3	125	%	70-130	12.06.18 13.25		



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS03**
Lab Sample Id: 606837-003

Matrix: Soil
Date Collected: 11.27.18 16.15

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3071530

Date Prep: 12.03.18 08.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4110	25.0	mg/kg	12.03.18 11.05		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3071195

Date Prep: 11.29.18 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	274	15.0	mg/kg	11.30.18 04.24		1
Diesel Range Organics (DRO)	C10C28DRO	1270	15.0	mg/kg	11.30.18 04.24		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.30.18 04.24	U	1
Total TPH	PHC635	1540	15.0	mg/kg	11.30.18 04.24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-135	11.30.18 04.24		
o-Terphenyl	84-15-1	113	%	70-135	11.30.18 04.24		



Certificate of Analytical Results 606837

LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS03**
 Lab Sample Id: 606837-003

Matrix: Soil
 Date Collected: 11.27.18 16.15

Date Received: 11.29.18 11.37
 Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 12.05.18 16.00

Basis: Wet Weight

Seq Number: 3071910

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	12.06.18 14.51	U	1
Toluene	108-88-3	0.0836	0.00199	mg/kg	12.06.18 14.51		1
Ethylbenzene	100-41-4	0.116	0.00199	mg/kg	12.06.18 14.51		1
m,p-Xylenes	179601-23-1	0.342	0.00398	mg/kg	12.06.18 14.51		1
o-Xylene	95-47-6	0.163	0.00199	mg/kg	12.06.18 14.51		1
Total Xylenes	1330-20-7	0.505	0.00199	mg/kg	12.06.18 14.51		1
Total BTEX		0.705	0.00199	mg/kg	12.06.18 14.51		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	111	%	70-130	12.06.18 14.51		
4-Bromofluorobenzene	460-00-4	149	%	70-130	12.06.18 14.51	**	



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS04** Matrix: Soil Date Received: 11.29.18 11.37
 Lab Sample Id: 606837-004 Date Collected: 11.27.18 16.20 Sample Depth: 0.5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.03.18 08.00 Basis: Wet Weight
 Seq Number: 3071530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	2480	24.9	mg/kg	12.03.18 11.29		5

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 11.29.18 16.00 Basis: Wet Weight
 Seq Number: 3071195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	7040	74.8	mg/kg	11.30.18 04.43		5
Diesel Range Organics (DRO)	C10C28DRO	10700	74.8	mg/kg	11.30.18 04.43		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	109	74.8	mg/kg	11.30.18 04.43		5
Total TPH	PHC635	17800	74.8	mg/kg	11.30.18 04.43		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	129	%	70-135	11.30.18 04.43	
o-Terphenyl	84-15-1	248	%	70-135	11.30.18 04.43	**



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS04**
Lab Sample Id: 606837-004

Matrix: Soil
Date Collected: 11.27.18 16.20

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 12.06.18 09.00

Basis: Wet Weight

Seq Number: 3071866

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	4.83	2.00	mg/kg	12.06.18 16.16		1000
Toluene	108-88-3	41.4	2.00	mg/kg	12.06.18 16.16		1000
Ethylbenzene	100-41-4	16.2	2.00	mg/kg	12.06.18 16.16		1000
m,p-Xylenes	179601-23-1	53.8	4.00	mg/kg	12.06.18 16.16		1000
o-Xylene	95-47-6	17.3	2.00	mg/kg	12.06.18 16.16		1000
Total Xylenes	1330-20-7	71.1	2.00	mg/kg	12.06.18 16.16		1000
Total BTEX		134	2.00	mg/kg	12.06.18 16.16		1000
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	74	%	70-130	12.06.18 16.16		
4-Bromofluorobenzene	460-00-4	74	%	70-130	12.06.18 16.16		



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS05** Matrix: Soil Date Received: 11.29.18 11.37
 Lab Sample Id: 606837-005 Date Collected: 11.27.18 16.30 Sample Depth: 0.5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.03.18 08.00 Basis: Wet Weight
 Seq Number: 3071530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	38500	250	mg/kg	12.03.18 11.36		50

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 11.29.18 16.00 Basis: Wet Weight
 Seq Number: 3071195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	5510	74.9	mg/kg	11.30.18 05.02		5
Diesel Range Organics (DRO)	C10C28DRO	12200	74.9	mg/kg	11.30.18 05.02		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	131	74.9	mg/kg	11.30.18 05.02		5
Total TPH	PHC635	17800	74.9	mg/kg	11.30.18 05.02		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	109	%	70-135	11.30.18 05.02	
o-Terphenyl	84-15-1	275	%	70-135	11.30.18 05.02	**



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS05**
Lab Sample Id: 606837-005

Matrix: Soil
Date Collected: 11.27.18 16.30

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 12.06.18 09.00

Basis: Wet Weight

Seq Number: 3071866

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	2.64	0.501	mg/kg	12.06.18 14.09		250
Toluene	108-88-3	33.8	0.501	mg/kg	12.06.18 14.09		250
Ethylbenzene	100-41-4	15.1	0.501	mg/kg	12.06.18 14.09		250
m,p-Xylenes	179601-23-1	58.0	1.00	mg/kg	12.06.18 14.09		250
o-Xylene	95-47-6	21.2	0.501	mg/kg	12.06.18 14.09		250
Total Xylenes	1330-20-7	79.2	0.501	mg/kg	12.06.18 14.09		250
Total BTEX		131	0.501	mg/kg	12.06.18 14.09		250
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	105	%	70-130	12.06.18 14.09		
4-Bromofluorobenzene	460-00-4	151	%	70-130	12.06.18 14.09	**	



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS06** Matrix: Soil Date Received: 11.29.18 11.37
 Lab Sample Id: 606837-006 Date Collected: 11.27.18 16.40 Sample Depth: 0.5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 12.03.18 08.00 Basis: Wet Weight
 Seq Number: 3071530

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.48	4.97	mg/kg	12.03.18 11.54		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 11.29.18 16.00 Basis: Wet Weight
 Seq Number: 3071195

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	11.30.18 05.21	U	1
Diesel Range Organics (DRO)	C10C28DRO	29.2	15.0	mg/kg	11.30.18 05.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	11.30.18 05.21	U	1
Total TPH	PHC635	29.2	15.0	mg/kg	11.30.18 05.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	11.30.18 05.21	
o-Terphenyl	84-15-1	99	%	70-135	11.30.18 05.21	



Certificate of Analytical Results 606837



LT Environmental, Inc., Arvada, CO

PLU 420

Sample Id: **SS06**
Lab Sample Id: 606837-006

Matrix: Soil
Date Collected: 11.27.18 16.40

Date Received: 11.29.18 11.37
Sample Depth: 0.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3071866

Prep Method: SW5030B

% Moisture:

Date Prep: 12.06.18 09.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	12.06.18 12.42	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
Total BTEX		<0.00200	0.00200	mg/kg	12.06.18 12.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	12.06.18 12.42		
1,4-Difluorobenzene	540-36-3	106	%	70-130	12.06.18 12.42		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3071530

MB Sample Id: 7667216-1-BLK

Matrix: Solid

LCS Sample Id: 7667216-1-BKS

Prep Method: E300P

Date Prep: 12.03.18

LCSD Sample Id: 7667216-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<5.00	250	270	108	261	104	90-110	3	20	mg/kg	12.03.18 09:32	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3071530

Parent Sample Id: 606836-011

Matrix: Soil

MS Sample Id: 606836-011 S

Prep Method: E300P

Date Prep: 12.03.18

MSD Sample Id: 606836-011 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	152	249	427	110	422	108	90-110	1	20	mg/kg	12.03.18 09:50	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3071530

Parent Sample Id: 606851-001

Matrix: Soil

MS Sample Id: 606851-001 S

Prep Method: E300P

Date Prep: 12.03.18

MSD Sample Id: 606851-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	6.41	250	274	107	274	107	90-110	0	20	mg/kg	12.03.18 11:17	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3071195

MB Sample Id: 7667088-1-BLK

Matrix: Solid

LCS Sample Id: 7667088-1-BKS

Prep Method: TX1005P

Date Prep: 11.29.18

LCSD Sample Id: 7667088-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	1010	101	996	100	70-135	1	20	mg/kg	11.29.18 21:42	
Diesel Range Organics (DRO)	<8.13	1000	1000	100	997	100	70-135	0	20	mg/kg	11.29.18 21:42	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	108		123		118		70-135	%	11.29.18 21:42
o-Terphenyl	110		108		101		70-135	%	11.29.18 21:42

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420

Analytical Method: TPH by SW8015 Mod

Seq Number: 3071195

Parent Sample Id: 606827-001

Matrix: Soil

MS Sample Id: 606827-001 S

Prep Method: TX1005P

Date Prep: 11.29.18

MSD Sample Id: 606827-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	8.98	997	942	94	1030	102	70-135	9	20	mg/kg	11.29.18 22:39	
Diesel Range Organics (DRO)	<8.10	997	940	94	1020	102	70-135	8	20	mg/kg	11.29.18 22:39	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	116		122		70-135	%	11.29.18 22:39
o-Terphenyl	98		105		70-135	%	11.29.18 22:39

Analytical Method: BTEX by EPA 8021B

Seq Number: 3071910

MB Sample Id: 7667512-1-BLK

Matrix: Solid

LCS Sample Id: 7667512-1-BKS

Prep Method: SW5030B

Date Prep: 12.05.18

LCSD Sample Id: 7667512-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000385	0.100	0.0964	96	0.0731	73	70-130	27	35	mg/kg	12.06.18 10:08	
Toluene	<0.000456	0.100	0.0951	95	0.0814	81	70-130	16	35	mg/kg	12.06.18 10:08	
Ethylbenzene	<0.000565	0.100	0.102	102	0.0888	89	70-130	14	35	mg/kg	12.06.18 10:08	
m,p-Xylenes	<0.00101	0.200	0.192	96	0.170	85	70-130	12	35	mg/kg	12.06.18 10:08	
o-Xylene	<0.000344	0.100	0.0941	94	0.0853	85	70-130	10	35	mg/kg	12.06.18 10:08	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	112		99		93		70-130	%	12.06.18 10:08
4-Bromofluorobenzene	82		101		104		70-130	%	12.06.18 10:08

Analytical Method: BTEX by EPA 8021B

Seq Number: 3071866

MB Sample Id: 7667490-1-BLK

Matrix: Solid

LCS Sample Id: 7667490-1-BKS

Prep Method: SW5030B

Date Prep: 12.06.18

LCSD Sample Id: 7667490-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00201	0.101	0.121	120	0.118	118	70-130	3	35	mg/kg	12.06.18 08:27	
Toluene	<0.00201	0.101	0.108	107	0.104	104	70-130	4	35	mg/kg	12.06.18 08:27	
Ethylbenzene	<0.00201	0.101	0.124	123	0.118	118	70-130	5	35	mg/kg	12.06.18 08:27	
m,p-Xylenes	<0.00402	0.201	0.247	123	0.241	120	70-130	2	35	mg/kg	12.06.18 08:27	
o-Xylene	<0.00201	0.101	0.118	117	0.114	114	70-130	3	35	mg/kg	12.06.18 08:27	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	100		104		102		70-130	%	12.06.18 08:27
4-Bromofluorobenzene	99		114		108		70-130	%	12.06.18 08:27

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* |(C-E) / (C+E)|
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420

Analytical Method: BTEX by EPA 8021B

Seq Number: 3071866

Parent Sample Id: 606955-003

Matrix: Soil

MS Sample Id: 606955-003 S

Prep Method: SW5030B

Date Prep: 12.06.18

MSD Sample Id: 606955-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00400	0.200	0.0856	43	0.102	51	70-130	17	35	mg/kg	12.06.18 09:09	X
Toluene	<0.00400	0.200	0.0772	39	0.0884	44	70-130	14	35	mg/kg	12.06.18 09:09	X
Ethylbenzene	<0.00400	0.200	0.0796	40	0.0909	45	70-130	13	35	mg/kg	12.06.18 09:09	X
m,p-Xylenes	<0.00800	0.400	0.141	35	0.162	41	70-130	14	35	mg/kg	12.06.18 09:09	X
o-Xylene	<0.00400	0.200	0.0711	36	0.0844	42	70-130	17	35	mg/kg	12.06.18 09:09	X

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	130		114		70-130	%	12.06.18 09:09
4-Bromofluorobenzene	114		118		70-130	%	12.06.18 09:09

Analytical Method: BTEX by EPA 8021B

Seq Number: 3071910

Parent Sample Id: 607535-004

Matrix: Soil

MS Sample Id: 607535-004 S

Prep Method: SW5030B

Date Prep: 12.05.18

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	Limits	Units	Analysis Date	Flag
Benzene	<0.000383	0.0996	0.0718	72	70-130	mg/kg	12.06.18 10:46	
Toluene	<0.000454	0.0996	0.0422	42	70-130	mg/kg	12.06.18 10:46	X
Ethylbenzene	<0.000563	0.0996	0.0289	29	70-130	mg/kg	12.06.18 10:46	X
m,p-Xylenes	<0.00101	0.199	0.0509	26	70-130	mg/kg	12.06.18 10:46	X
o-Xylene	<0.000343	0.0996	0.0257	26	70-130	mg/kg	12.06.18 10:46	X

Surrogate	MS %Rec	MS Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	113		70-130	%	12.06.18 10:46
4-Bromofluorobenzene	93		70-130	%	12.06.18 10:46

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

1004831

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com

Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	
Company Name:	LT Environmental, Inc., Permian office	Company Name:	
Address:	3300 North A Street	Address:	
City, State ZIP:	Midland, TX 79705	City, State ZIP:	
Phone:	432.704.5178	Email:	Abaker@ltenv.com

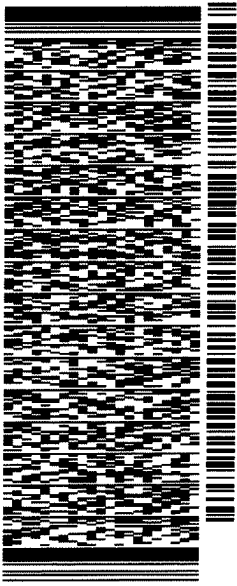
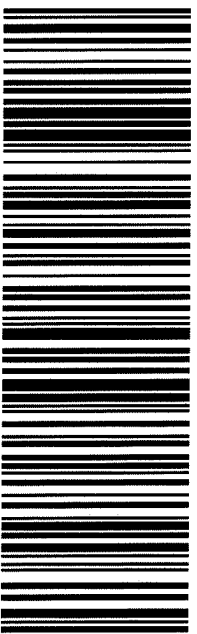
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐ State of Project:	
Reporting Level: I ☐ II ☐ III ☐ IV ☐	Deliverables: EDD ☐ ADAPT ☐ Other: ☐

Project Name:	PLU 420	Turn Around		ANALYSIS REQUEST	Work Order Notes
Project Number:		Routine ☒ Rush:			
P.O. Number:		Due Date:	11/27/2018		
Sampler's Name:	Lynda Lankbach				
SAMPLE RECEIPT Temperature (°C): 04°C Received Intact: Yes No Cooler Custody Seals: Yes No N/A Sample Custody Seals: Yes No N/A		Temp Blank: Yes No Wet Ice: Yes No Thermometer ID: 100 Correction Factor: -0.1 Total Containers:			
Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers
SS01	S	11/27/2018	16:00	0.5'	1
SS02	S		16:05		1
SS03	S		16:15		1
SS04	S		16:20		1
SS05	S		16:30		1
SS06	S		16:46		1
TPH (EPA 8015) ☒ BTEX (EPA 8021) ☒ Chloride (EPA 300.0) ☒					
TAT starts the day received by the lab, if received by 4:30pm Sample Comments					

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 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 1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to 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
		11/27/2018 18:50			11/28/18/10:45 AM

ORIGIN ID:CAOA (515) 881-6245 XENCO PAC N MAIL 910 W PIERCE ST CARLSBAD, NM 88220 UNITED STATES US		SHIP DATE: 28NOV18 ACTWGT: 53.00 LB CAD: 101813706INET4040 DIMS: 26x16x14 IN
TO HOLD FOR XENCO FEDEX EXPRESS SHIP CENTER FEDEX SHIP CENTER 3600 COUNTY RD 1276 S MIDLAND TX 79711 (806) 794-1296 INV: REF: PO: DEPT:		BILL RECIPIENT
		
		
TRK# 7738 3207 5022 0201	THU - 29 NOV HOLD STANDARD OVERNIGHT HLD MAFA TX:US LBB	41 MAFA
		

552J2/E4AF/DCA5

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Client: LT Environmental, Inc.

Date/ Time Received: 11/29/2018 11:37:00 AM

Work Order #: 606837

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.3
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 11/29/2018

Checklist reviewed by:

Jessica Kramer

Date: 11/29/2018

Analytical Report 612810

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

31-JAN-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)



31-JAN-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **612810**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 612810. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 612810 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

Julian Martinez

Midland Laboratory Director

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**Sample Cross Reference 612810****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH01	S	01-25-19 10:50	2 ft	612810-001
PH01A	S	01-25-19 11:50	7.5 ft	612810-002
PH02	S	01-25-19 12:00	2 ft	612810-003
PH02A	S	01-25-19 13:00	10 ft	612810-004
PH03	S	01-25-19 13:50	5 ft	612810-005
PH03A	S	01-25-19 14:40	9 ft	612810-006
PH04	S	01-25-19 14:55	1 ft	612810-007
PH04A	S	01-25-19 15:10	4 ft	612810-008
PH05	S	01-25-19 15:20	1.5 ft	612810-009
PH05A	S	01-25-19 15:40	4 ft	612810-010

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: PLU 420 Battery**

Project ID:
Work Order Number(s): 612810

Report Date: 31-JAN-19
Date Received: 01/29/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3077498 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 612810-007, 612810-009.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Batch: LBA-3077576 Inorganic Anions by EPA 300

Lab Sample ID 612810-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).

Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference.

Samples in the analytical batch are: 612810-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.



Certificate of Analysis Summary 612810

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id:

Contact: Adrian Baker

Project Location: Delaware Basin

Date Received in Lab: Tue Jan-29-19 01:15 pm

Report Date: 31-JAN-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	612810-001	612810-002	612810-003	612810-004	612810-005	612810-006
	<i>Field Id:</i>	PH01	PH01A	PH02	PH02A	PH03	PH03A
	<i>Depth:</i>	2- ft	7.5- ft	2- ft	10- ft	5- ft	9- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-25-19 10:50	Jan-25-19 11:50	Jan-25-19 12:00	Jan-25-19 13:00	Jan-25-19 13:50	Jan-25-19 14:40
BTEX by EPA 8021B	<i>Extracted:</i>	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00
	<i>Analyzed:</i>	Jan-30-19 03:30	Jan-30-19 03:49	Jan-30-19 07:55	Jan-30-19 04:08	Jan-30-19 04:27	Jan-30-19 05:42
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	0.00474 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00200 0.00200	<0.00200 0.00200	0.0998 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	0.0193 0.00202	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00399 0.00399	<0.00399 0.00399	0.0311 0.00403	<0.00398 0.00398	<0.00400 0.00400	<0.00402 0.00402
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	0.113 0.00202	<0.00199 0.00199	0.00205 0.00200	<0.00201 0.00201
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	0.144 0.00202	<0.00199 0.00199	0.00205 0.00200	<0.00201 0.00201
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	0.268 0.00202	<0.00199 0.00199	0.00205 0.00200	<0.00201 0.00201
Inorganic Anions by EPA 300	<i>Extracted:</i>	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00
	<i>Analyzed:</i>	Jan-30-19 23:38	Jan-30-19 23:44	Jan-30-19 23:50	Jan-31-19 00:03	Jan-31-19 11:32	Jan-31-19 11:39
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		32.2 4.99	<4.99 4.99	<4.96 4.96	8.52 4.97	15.7 4.99	29.8 4.96
TPH by SW8015 Mod	<i>Extracted:</i>	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00
	<i>Analyzed:</i>	Jan-30-19 01:26	Jan-30-19 01:46	Jan-30-19 02:06	Jan-30-19 02:26	Jan-30-19 03:26	Jan-30-19 03:46
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	154 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		18.6 15.0	<15.0 15.0	993 15.0	<15.0 15.0	219 15.0	24.8 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<15.0 15.0	149 15.0	<15.0 15.0	36.8 15.0	<15.0 15.0
Total TPH		18.6 15.0	<15.0 15.0	1300 15.0	<15.0 15.0	256 15.0	24.8 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Julian Martinez
Midland Laboratory Director



Certificate of Analysis Summary 612810

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id:

Contact: Adrian Baker

Project Location: Delaware Basin

Date Received in Lab: Tue Jan-29-19 01:15 pm

Report Date: 31-JAN-19

Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	612810-007	612810-008	612810-009	612810-010		
	<i>Field Id:</i>	PH04	PH04A	PH05	PH05A		
	<i>Depth:</i>	1- ft	4- ft	1.5- ft	4- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Jan-25-19 14:55	Jan-25-19 15:10	Jan-25-19 15:20	Jan-25-19 15:40		
BTEX by EPA 8021B	<i>Extracted:</i>	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00	Jan-29-19 15:00		
	<i>Analyzed:</i>	Jan-30-19 08:14	Jan-30-19 06:01	Jan-30-19 07:36	Jan-30-19 06:20		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00199 0.00199	<0.00202 0.00202	0.00344 0.00200	<0.00200 0.00200		
Toluene		0.0431 0.00199	<0.00202 0.00202	0.0994 0.00200	<0.00200 0.00200		
Ethylbenzene		0.0126 0.00199	<0.00202 0.00202	0.0230 0.00200	<0.00200 0.00200		
m,p-Xylenes		0.0226 0.00398	<0.00403 0.00403	0.0389 0.00399	<0.00400 0.00400		
o-Xylene		0.0664 0.00199	<0.00202 0.00202	0.116 0.00200	<0.00200 0.00200		
Total Xylenes		0.0890 0.00199	<0.00202 0.00202	0.155 0.00200	<0.00200 0.00200		
Total BTEX		0.145 0.00199	<0.00202 0.00202	0.281 0.00200	<0.00200 0.00200		
Inorganic Anions by EPA 300	<i>Extracted:</i>	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00	Jan-30-19 11:00		
	<i>Analyzed:</i>	Jan-31-19 00:27	Jan-31-19 00:49	Jan-31-19 00:55	Jan-31-19 01:01		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		1460 25.0	50.3 4.99	147 4.95	<4.95 4.95		
TPH by SW8015 Mod	<i>Extracted:</i>	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00	Jan-29-19 16:00		
	<i>Analyzed:</i>	Jan-30-19 04:06	Jan-30-19 04:26	Jan-30-19 04:46	Jan-30-19 05:06		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		247 15.0	<15.0 15.0	234 14.9	<15.0 15.0		
Diesel Range Organics (DRO)		1960 15.0	<15.0 15.0	1260 14.9	<15.0 15.0		
Motor Oil Range Hydrocarbons (MRO)		300 15.0	<15.0 15.0	202 14.9	<15.0 15.0		
Total TPH		2510 15.0	<15.0 15.0	1700 14.9	<15.0 15.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use.
The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories.
XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented.
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Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Julian Martinez
Midland Laboratory Director



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH01** Matrix: Soil Date Received: 01.29.19 13.15
 Lab Sample Id: 612810-001 Date Collected: 01.25.19 10.50 Sample Depth: 2 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 01.30.19 11.00 Basis: Wet Weight
 Seq Number: 3077576

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	32.2	4.99	mg/kg	01.30.19 23.38		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 01.29.19 16.00 Basis: Wet Weight
 Seq Number: 3077483

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 01.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	18.6	15.0	mg/kg	01.30.19 01.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 01.26	U	1
Total TPH	PHC635	18.6	15.0	mg/kg	01.30.19 01.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	01.30.19 01.26	
o-Terphenyl	84-15-1	100	%	70-135	01.30.19 01.26	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH01**
Lab Sample Id: 612810-001

Matrix: Soil
Date Collected: 01.25.19 10.50

Date Received: 01.29.19 13.15
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.19 03.30	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.19 03.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.19 03.30		
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.30.19 03.30		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH01A**
Lab Sample Id: 612810-002

Matrix: Soil
Date Collected: 01.25.19 11.50

Date Received: 01.29.19 13.15
Sample Depth: 7.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.99	4.99	mg/kg	01.30.19 23.44	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 01.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.30.19 01.46	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 01.46	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.30.19 01.46	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	97	%	70-135	01.30.19 01.46	
o-Terphenyl	84-15-1	99	%	70-135	01.30.19 01.46	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH01A**
 Lab Sample Id: 612810-002

Matrix: Soil
 Date Collected: 01.25.19 11.50

Date Received: 01.29.19 13.15
 Sample Depth: 7.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	01.30.19 03.49	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.19 03.49	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.30.19 03.49		
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.30.19 03.49		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH02**
Lab Sample Id: 612810-003

Matrix: Soil
Date Collected: 01.25.19 12.00

Date Received: 01.29.19 13.15
Sample Depth: 2 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	01.30.19 23.50	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	154	15.0	mg/kg	01.30.19 02.06		1
Diesel Range Organics (DRO)	C10C28DRO	993	15.0	mg/kg	01.30.19 02.06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	149	15.0	mg/kg	01.30.19 02.06		1
Total TPH	PHC635	1300	15.0	mg/kg	01.30.19 02.06		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	109	%	70-135	01.30.19 02.06		
o-Terphenyl	84-15-1	119	%	70-135	01.30.19 02.06		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH02**
Lab Sample Id: 612810-003

Matrix: Soil
Date Collected: 01.25.19 12.00

Date Received: 01.29.19 13.15
Sample Depth: 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00474	0.00202	mg/kg	01.30.19 07.55		1
Toluene	108-88-3	0.0998	0.00202	mg/kg	01.30.19 07.55		1
Ethylbenzene	100-41-4	0.0193	0.00202	mg/kg	01.30.19 07.55		1
m,p-Xylenes	179601-23-1	0.0311	0.00403	mg/kg	01.30.19 07.55		1
o-Xylene	95-47-6	0.113	0.00202	mg/kg	01.30.19 07.55		1
Total Xylenes	1330-20-7	0.144	0.00202	mg/kg	01.30.19 07.55		1
Total BTEX		0.268	0.00202	mg/kg	01.30.19 07.55		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	112	%	70-130	01.30.19 07.55		
4-Bromofluorobenzene	460-00-4	76	%	70-130	01.30.19 07.55		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH02A**
Lab Sample Id: 612810-004

Matrix: Soil
Date Collected: 01.25.19 13.00

Date Received: 01.29.19 13.15
Sample Depth: 10 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	8.52	4.97	mg/kg	01.31.19 00.03		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 02.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.30.19 02.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 02.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.30.19 02.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	01.30.19 02.26	
o-Terphenyl	84-15-1	99	%	70-135	01.30.19 02.26	



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LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH02A**
Lab Sample Id: 612810-004

Matrix: Soil
Date Collected: 01.25.19 13.00

Date Received: 01.29.19 13.15
Sample Depth: 10 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	01.30.19 04.08	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
Total BTEX		<0.00199	0.00199	mg/kg	01.30.19 04.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	01.30.19 04.08		
1,4-Difluorobenzene	540-36-3	111	%	70-130	01.30.19 04.08		



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LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH03**
 Lab Sample Id: 612810-005

Matrix: Soil
 Date Collected: 01.25.19 13.50

Date Received: 01.29.19 13.15
 Sample Depth: 5 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 01.30.19 11.00

Basis: Wet Weight

Seq Number: 3077576

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15.7	4.99	mg/kg	01.31.19 11.32		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 01.29.19 16.00

Basis: Wet Weight

Seq Number: 3077483

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 03.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	219	15.0	mg/kg	01.30.19 03.26		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	36.8	15.0	mg/kg	01.30.19 03.26		1
Total TPH	PHC635	256	15.0	mg/kg	01.30.19 03.26		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	01.30.19 03.26	
o-Terphenyl	84-15-1	102	%	70-135	01.30.19 03.26	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH03**
Lab Sample Id: 612810-005

Matrix: Soil
Date Collected: 01.25.19 13.50

Date Received: 01.29.19 13.15
Sample Depth: 5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.19 04.27	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.19 04.27	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.19 04.27	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.19 04.27	U	1
o-Xylene	95-47-6	0.00205	0.00200	mg/kg	01.30.19 04.27		1
Total Xylenes	1330-20-7	0.00205	0.00200	mg/kg	01.30.19 04.27		1
Total BTEX		0.00205	0.00200	mg/kg	01.30.19 04.27		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	117	%	70-130	01.30.19 04.27		
1,4-Difluorobenzene	540-36-3	107	%	70-130	01.30.19 04.27		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH03A**
Lab Sample Id: 612810-006

Matrix: Soil
Date Collected: 01.25.19 14.40

Date Received: 01.29.19 13.15
Sample Depth: 9 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	29.8	4.96	mg/kg	01.31.19 11.39		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 03.46	U	1
Diesel Range Organics (DRO)	C10C28DRO	24.8	15.0	mg/kg	01.30.19 03.46		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 03.46	U	1
Total TPH	PHC635	24.8	15.0	mg/kg	01.30.19 03.46		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.30.19 03.46	
o-Terphenyl	84-15-1	98	%	70-135	01.30.19 03.46	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH03A**
Lab Sample Id: 612810-006

Matrix: Soil
Date Collected: 01.25.19 14.40

Date Received: 01.29.19 13.15
Sample Depth: 9 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3077498

Date Prep: 01.29.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	01.30.19 05.42	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
Total BTEX		<0.00201	0.00201	mg/kg	01.30.19 05.42	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	01.30.19 05.42		
1,4-Difluorobenzene	540-36-3	109	%	70-130	01.30.19 05.42		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH04**
Lab Sample Id: 612810-007

Matrix: Soil
Date Collected: 01.25.19 14.55

Date Received: 01.29.19 13.15
Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1460	25.0	mg/kg	01.31.19 00.27		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	247	15.0	mg/kg	01.30.19 04.06		1
Diesel Range Organics (DRO)	C10C28DRO	1960	15.0	mg/kg	01.30.19 04.06		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	300	15.0	mg/kg	01.30.19 04.06		1
Total TPH	PHC635	2510	15.0	mg/kg	01.30.19 04.06		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	119	%	70-135	01.30.19 04.06		
o-Terphenyl	84-15-1	125	%	70-135	01.30.19 04.06		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH04**
Lab Sample Id: 612810-007

Matrix: Soil
Date Collected: 01.25.19 14.55

Date Received: 01.29.19 13.15
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	01.30.19 08.14	U	1
Toluene	108-88-3	0.0431	0.00199	mg/kg	01.30.19 08.14		1
Ethylbenzene	100-41-4	0.0126	0.00199	mg/kg	01.30.19 08.14		1
m,p-Xylenes	179601-23-1	0.0226	0.00398	mg/kg	01.30.19 08.14		1
o-Xylene	95-47-6	0.0664	0.00199	mg/kg	01.30.19 08.14		1
Total Xylenes	1330-20-7	0.0890	0.00199	mg/kg	01.30.19 08.14		1
Total BTEX		0.145	0.00199	mg/kg	01.30.19 08.14		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	162	%	70-130	01.30.19 08.14	**	
1,4-Difluorobenzene	540-36-3	105	%	70-130	01.30.19 08.14		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH04A**
Lab Sample Id: 612810-008

Matrix: Soil
Date Collected: 01.25.19 15.10

Date Received: 01.29.19 13.15
Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	50.3	4.99	mg/kg	01.31.19 00.49		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 04.26	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.30.19 04.26	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 04.26	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.30.19 04.26	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	01.30.19 04.26	
o-Terphenyl	84-15-1	96	%	70-135	01.30.19 04.26	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH04A**
Lab Sample Id: 612810-008

Matrix: Soil
Date Collected: 01.25.19 15.10

Date Received: 01.29.19 13.15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3077498

Date Prep: 01.29.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	01.30.19 06.01	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
Total BTEX		<0.00202	0.00202	mg/kg	01.30.19 06.01	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	114	%	70-130	01.30.19 06.01		
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.30.19 06.01		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH05**
Lab Sample Id: 612810-009

Matrix: Soil
Date Collected: 01.25.19 15.20

Date Received: 01.29.19 13.15
Sample Depth: 1.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	147	4.95	mg/kg	01.31.19 00.55		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	234	14.9	mg/kg	01.30.19 04.46		1
Diesel Range Organics (DRO)	C10C28DRO	1260	14.9	mg/kg	01.30.19 04.46		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	202	14.9	mg/kg	01.30.19 04.46		1
Total TPH	PHC635	1700	14.9	mg/kg	01.30.19 04.46		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1-Chlorooctane	111-85-3	112	%	70-135	01.30.19 04.46		
o-Terphenyl	84-15-1	123	%	70-135	01.30.19 04.46		



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH05**
 Lab Sample Id: 612810-009

Matrix: Soil
 Date Collected: 01.25.19 15.20

Date Received: 01.29.19 13.15
 Sample Depth: 1.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00344	0.00200	mg/kg	01.30.19 07.36		1
Toluene	108-88-3	0.0994	0.00200	mg/kg	01.30.19 07.36		1
Ethylbenzene	100-41-4	0.0230	0.00200	mg/kg	01.30.19 07.36		1
m,p-Xylenes	179601-23-1	0.0389	0.00399	mg/kg	01.30.19 07.36		1
o-Xylene	95-47-6	0.116	0.00200	mg/kg	01.30.19 07.36		1
Total Xylenes	1330-20-7	0.155	0.00200	mg/kg	01.30.19 07.36		1
Total BTEX		0.281	0.00200	mg/kg	01.30.19 07.36		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	113	%	70-130	01.30.19 07.36		
4-Bromofluorobenzene	460-00-4	168	%	70-130	01.30.19 07.36	**	



Certificate of Analytical Results 612810

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH05A**
 Lab Sample Id: 612810-010

Matrix: Soil
 Date Collected: 01.25.19 15.40

Date Received: 01.29.19 13.15
 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077576

Date Prep: 01.30.19 11.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.95	4.95	mg/kg	01.31.19 01.01	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077483

Date Prep: 01.29.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	01.30.19 05.06	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	01.30.19 05.06	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	01.30.19 05.06	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	01.30.19 05.06	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	01.30.19 05.06	
o-Terphenyl	84-15-1	98	%	70-135	01.30.19 05.06	



Certificate of Analytical Results 612810



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH05A**
Lab Sample Id: 612810-010

Matrix: Soil
Date Collected: 01.25.19 15.40

Date Received: 01.29.19 13.15
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 01.29.19 15.00

Basis: Wet Weight

Seq Number: 3077498

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	01.30.19 06.20	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
Total BTEX		<0.00200	0.00200	mg/kg	01.30.19 06.20	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	110	%	70-130	01.30.19 06.20		
4-Bromofluorobenzene	460-00-4	110	%	70-130	01.30.19 06.20		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077576

MB Sample Id: 7670788-1-BLK

Matrix: Solid

LCS Sample Id: 7670788-1-BKS

Prep Method: E300P

Date Prep: 01.30.19

LCSD Sample Id: 7670788-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	258	103	254	102	90-110	2	20	mg/kg	01.30.19 22:20	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077576

Parent Sample Id: 612806-001

Matrix: Soil

MS Sample Id: 612806-001 S

Prep Method: E300P

Date Prep: 01.30.19

MSD Sample Id: 612806-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	342	250	611	108	602	104	90-110	1	20	mg/kg	01.30.19 22:39	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077576

Parent Sample Id: 612810-004

Matrix: Soil

MS Sample Id: 612810-004 S

Prep Method: E300P

Date Prep: 01.30.19

MSD Sample Id: 612810-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	8.52	249	286	111	268	104	90-110	6	20	mg/kg	01.31.19 00:09	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3077483

MB Sample Id: 7670692-1-BLK

Matrix: Solid

LCS Sample Id: 7670692-1-BKS

Prep Method: TX1005P

Date Prep: 01.29.19

LCSD Sample Id: 7670692-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	924	92	930	93	70-135	1	20	mg/kg	01.29.19 22:07	
Diesel Range Organics (DRO)	<8.13	1000	1040	104	1050	105	70-135	1	20	mg/kg	01.29.19 22:07	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		126		127		70-135	%	01.29.19 22:07
o-Terphenyl	106		115		118		70-135	%	01.29.19 22:07

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3077483

Parent Sample Id: 612806-001

Matrix: Soil

MS Sample Id: 612806-001 S

Prep Method: TX1005P

Date Prep: 01.29.19

MSD Sample Id: 612806-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	999	884	88	911	91	70-135	3	20	mg/kg	01.29.19 23:07	
Diesel Range Organics (DRO)	<8.12	999	888	89	933	94	70-135	5	20	mg/kg	01.29.19 23:07	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	122		127		70-135	%	01.29.19 23:07
o-Terphenyl	114		118		70-135	%	01.29.19 23:07

Analytical Method: BTEX by EPA 8021B

Seq Number: 3077498

MB Sample Id: 7670733-1-BLK

Matrix: Solid

LCS Sample Id: 7670733-1-BKS

Prep Method: SW5030B

Date Prep: 01.29.19

LCSD Sample Id: 7670733-1-BSL

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000388	0.101	0.108	107	0.105	105	70-130	3	35	mg/kg	01.29.19 23:44	
Toluene	<0.000459	0.101	0.0959	95	0.0937	94	70-130	2	35	mg/kg	01.29.19 23:44	
Ethylbenzene	<0.000569	0.101	0.0913	90	0.0893	90	70-130	2	35	mg/kg	01.29.19 23:44	
m,p-Xylenes	<0.00102	0.202	0.177	88	0.175	88	70-130	1	35	mg/kg	01.29.19 23:44	
o-Xylene	<0.000347	0.101	0.0905	90	0.0887	89	70-130	2	35	mg/kg	01.29.19 23:44	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	104		107		107		70-130	%	01.29.19 23:44
4-Bromofluorobenzene	95		103		102		70-130	%	01.29.19 23:44

Analytical Method: BTEX by EPA 8021B

Seq Number: 3077498

Parent Sample Id: 612806-001

Matrix: Soil

MS Sample Id: 612806-001 S

Prep Method: SW5030B

Date Prep: 01.29.19

MSD Sample Id: 612806-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.101	101	0.0997	100	70-130	1	35	mg/kg	01.30.19 00:22	
Toluene	<0.000457	0.100	0.0903	90	0.0889	89	70-130	2	35	mg/kg	01.30.19 00:22	
Ethylbenzene	<0.000566	0.100	0.0858	86	0.0848	85	70-130	1	35	mg/kg	01.30.19 00:22	
m,p-Xylenes	<0.00102	0.200	0.168	84	0.167	83	70-130	1	35	mg/kg	01.30.19 00:22	
o-Xylene	<0.000345	0.100	0.0848	85	0.0839	84	70-130	1	35	mg/kg	01.30.19 00:22	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		107		70-130	%	01.30.19 00:22
4-Bromofluorobenzene	108		106		70-130	%	01.30.19 00:22

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Setting the Standard since 1990
 Stafford, Texas (281-240-4200)
 Dallas, Texas (214-902-0300)

CHAIN OF CUSTODY

Page 1 of 1

San Antonio, Texas (210-509-3334)
 Midland, Texas (432-704-5251)

www.xenoco.com

Phoenix, Arizona (480-355-0900)

Client / Reporting Information				Project Information				Analytical Information				Matrix Codes							
Company Name / Branch: <u>LI Environmental, Inc. Pelmaria Office</u>				Project Name/Number: <u>PLU 420 Battery</u>															
Company Address: <u>3900 N 18th St. Building 1 Unit 103 Midland, TX 79702</u>				Project Location: <u>2RP6102</u>															
Email: <u>oayes@lienv.com</u> Phone No: <u>7372</u>				Invoice To: <u>XRD: Kyle Littell</u>															
Webpage: <u>lienv.com</u> (432) 704-5178				PO Number: <u></u>															
Project Contact: <u>Adrian Baker</u>																			
Sampler's Name: <u>Amayegres</u>																			
No.	Field ID / Point of Collection	Sample Depth	Date	Time	Matrix	# of bottles	HCl	NaOH/Zn Acetate	HNO3	H2SO4	NaOH	NaHSO4	MeOH	NONE	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)		
1	PH01	2'	1/25	10:50	S	1									X	X	X		
2	PH01A	7.5'		11:50	S	1									X	X	X		
3	PH02	2'		12:00	S	1									X	X	X		
4	PH02A	10'		13:00	S	1									X	X	X		
5	PH03	5'		13:50	S	1									X	X	X		
6	PH03A	9'		14:40	S	1									X	X	X		
7	PH04	1'		14:55	S	1									X	X	X		
8	PH04A	4'		15:10	S	1									X	X	X		
9	PH05	1.5'		15:20	S	1									X	X	X		
10	PH05A	4'		15:40	S	1									X	X	X		
Turnaround Time (Business days)																			
Data Deliverable Information																			
Notes:																			
☒ Same Day TAT ☐ 5 Day TAT ☐ Level II Std QC ☐ Level IV (Full Data Pkg / raw data) ☐ Next Day EMERGENCY ☐ 7 Day TAT ☐ Level III Std QC+ Forms ☐ TRRP Level IV ☐ 2 Day EMERGENCY ☐ Contract TAT ☐ Level 3 (CLP Forms) ☐ UST / RG -411 ☐ 3 Day EMERGENCY ☐ TRRP Checklist																			
TAT Starts Day received by Lab, if received by 5:00 pm																			
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLE CHANGES POSSESSION, INCLUDING COURTESY DELIVERY																			
Relinquished by Sample:				Date Time: <u>1/25/19 0855</u>				Received By: <u>[Signature]</u>				Relinquished By: <u>[Signature]</u>				Date Time: <u>1/25/19 12:02</u>			
Relinquished by:				Date Time: <u>1/25/19 1330</u>				Received By: <u>[Signature]</u>				Relinquished By: <u>[Signature]</u>				Date Time: <u>1/29/19 1300</u>			
Relinquished by:				Date Time: <u>1/29/19 1300</u>				Received By: <u>[Signature]</u>				Relinquished By: <u>[Signature]</u>				Date Time: <u>1/29/19 1300</u>			
Custody Seal #				Preserved where applicable				FED-EX / UPS: Tracking #				On Ice: <u>11.5/11.4</u>				Cooler Temp: <u>18</u>			

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenoco. A minimum charge of \$75 will be applied to each project. Xenoco's liability will be limited to the cost of samples. Any samples received by Xenoco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.

774331208038



Client: LT Environmental, Inc.

Date/ Time Received: 01/29/2019 01:15:00 PM

Work Order #: 612810

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	1.4
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 01/29/2019

Checklist reviewed by:

Jessica Kramer

Date: 01/29/2019

Analytical Report 613219

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

04-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



04-FEB-19

Project Manager: **Adrian Baker**
LT Environmental, Inc.
4600 W. 60th Avenue
Arvada, CO 80003

Reference: XENCO Report No(s): **613219**
PLU 420 Battery
Project Address: Eddy County

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 613219. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 613219 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer
Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 613219****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS01	S	01-30-19 15:15	4 ft	613219-001
FS02	S	01-30-19 15:20	4 ft	613219-002
FS03	S	01-30-19 15:30	4 ft	613219-003
FS04	S	01-30-19 15:35	4 ft	613219-004
SW01	S	01-30-19 14:00	0 - 4 ft	613219-005
SW02	S	01-30-19 14:15	0 - 4 ft	613219-006
SW03	S	01-30-19 14:30	0 - 4 ft	613219-007
SW04	S	01-30-19 14:45	0 - 4 ft	613219-008



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420 Battery

Project ID:

Work Order Number(s): 613219

Report Date: 04-FEB-19

Date Received: 02/01/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3077978 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 613219-003,613219-008,613219-007,613219-005.

Surrogate 1,4-Difluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 613219-007.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 613219

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id:

Contact: Adrian Baker

Project Location: Eddy County

Date Received in Lab: Fri Feb-01-19 12:45 pm

Report Date: 04-FEB-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	613219-001	613219-002	613219-003	613219-004	613219-005	613219-006
	Field Id:	FS01	FS02	FS03	FS04	SW01	SW02
	Depth:	4- ft	4- ft	4- ft	4- ft	0-4 ft	0-4 ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Jan-30-19 15:15	Jan-30-19 15:20	Jan-30-19 15:30	Jan-30-19 15:35	Jan-30-19 14:00	Jan-30-19 14:15
BTEX by EPA 8021B	Extracted:	Feb-01-19 15:00	Feb-01-19 15:00	Feb-01-19 15:00	Feb-01-19 15:00	Feb-01-19 15:00	Feb-01-19 15:00
	Analyzed:	Feb-01-19 21:52	Feb-01-19 22:12	Feb-01-19 23:37	Feb-01-19 23:59	Feb-02-19 00:20	Feb-02-19 00:42
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00201 0.00201	<0.00200 0.00200	0.00529 0.00202	<0.00200 0.00200	<0.00201 0.00201
Toluene		0.00246 0.00200	<0.00201 0.00201	0.0286 0.00200	0.112 0.00202	0.0512 0.00200	0.00675 0.00201
Ethylbenzene		<0.00200 0.00200	<0.00201 0.00201	0.0311 0.00200	0.0443 0.00202	0.0520 0.00200	0.0133 0.00201
m,p-Xylenes		<0.00400 0.00400	<0.00402 0.00402	0.130 0.00399	0.179 0.00403	0.213 0.00400	0.0625 0.00402
o-Xylene		<0.00200 0.00200	<0.00201 0.00201	0.0588 0.00200	0.0830 0.00202	0.115 0.00200	0.0454 0.00201
Total Xylenes		<0.00200 0.00200	<0.00201 0.00201	0.189 0.00200	0.262 0.00202	0.328 0.00200	0.108 0.00201
Total BTEX		0.00246 0.00200	<0.00201 0.00201	0.249 0.00200	0.424 0.00202	0.431 0.00200	0.128 0.00201
Inorganic Anions by EPA 300	Extracted:	Feb-02-19 12:00	Feb-02-19 12:00	Feb-02-19 12:00	Feb-02-19 12:00	Feb-02-19 12:00	Feb-02-19 12:00
	Analyzed:	Feb-02-19 17:07	Feb-02-19 17:28	Feb-02-19 17:34	Feb-02-19 17:41	Feb-02-19 17:47	Feb-02-19 17:53
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		254 5.03	<5.00 5.00	325 5.01	79.8 5.01	770 4.96	14.9 4.99
TPH by SW8015 Mod	Extracted:	Feb-02-19 08:00	Feb-02-19 08:00	Feb-02-19 08:00	Feb-02-19 08:00	Feb-02-19 08:00	Feb-02-19 08:00
	Analyzed:	Feb-02-19 20:44	Feb-02-19 21:43	Feb-02-19 22:03	Feb-02-19 22:22	Feb-02-19 22:42	Feb-02-19 23:02
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<14.9 14.9	58.0 15.0	162 15.0	76.3 15.0	16.2 15.0
Diesel Range Organics (DRO)		<15.0 15.0	<14.9 14.9	559 15.0	883 15.0	583 15.0	177 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<14.9 14.9	103 15.0	165 15.0	103 15.0	30.8 15.0
Total TPH		<15.0 15.0	<14.9 14.9	720 15.0	1210 15.0	762 15.0	224 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 613219

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id:

Contact: Adrian Baker

Project Location: Eddy County

Date Received in Lab: Fri Feb-01-19 12:45 pm

Report Date: 04-FEB-19

Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	613219-007	613219-008				
	Field Id:	SW03	SW04				
	Depth:	0-4 ft	0-4 ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Jan-30-19 14:30	Jan-30-19 14:45				
BTEX by EPA 8021B	Extracted:	Feb-01-19 15:00	Feb-01-19 15:00				
	Analyzed:	Feb-02-19 01:03	Feb-02-19 01:24				
	Units/RL:	mg/kg RL	mg/kg RL				
Benzene		<0.00200	0.00200	<0.00200	0.00200		
Toluene		0.0134	0.00200	0.0308	0.00200		
Ethylbenzene		0.0404	0.00200	0.0450	0.00200		
m,p-Xylenes		0.172	0.00399	0.222	0.00401		
o-Xylene		0.0703	0.00200	0.107	0.00200		
Total Xylenes		0.242	0.00200	0.329	0.00200		
Total BTEX		0.296	0.00200	0.405	0.00200		
Inorganic Anions by EPA 300	Extracted:	Feb-02-19 12:00	Feb-02-19 12:00				
	Analyzed:	Feb-02-19 17:59	Feb-02-19 18:05				
	Units/RL:	mg/kg RL	mg/kg RL				
Chloride		243	4.97	218	4.98		
TPH by SW8015 Mod	Extracted:	Feb-02-19 08:00	Feb-02-19 08:00				
	Analyzed:	Feb-02-19 23:22	Feb-02-19 23:42				
	Units/RL:	mg/kg RL	mg/kg RL				
Gasoline Range Hydrocarbons (GRO)		26.3	14.9	104	15.0		
Diesel Range Organics (DRO)		388	14.9	908	15.0		
Motor Oil Range Hydrocarbons (MRO)		63.8	14.9	174	15.0		
Total TPH		478	14.9	1190	15.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS01**
 Lab Sample Id: 613219-001

Matrix: Soil
 Date Collected: 01.30.19 15.15

Date Received: 02.01.19 12.45
 Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.02.19 12.00

Basis: Wet Weight

Seq Number: 3077881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	254	5.03	mg/kg	02.02.19 17.07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.02.19 08.00

Basis: Wet Weight

Seq Number: 3077970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.02.19 20.44	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.02.19 20.44	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.02.19 20.44	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.02.19 20.44	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.02.19 20.44	
o-Terphenyl	84-15-1	100	%	70-135	02.02.19 20.44	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS01**
Lab Sample Id: 613219-001

Matrix: Soil
Date Collected: 01.30.19 15.15

Date Received: 02.01.19 12.45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.01.19 21.52	U	1
Toluene	108-88-3	0.00246	0.00200	mg/kg	02.01.19 21.52		1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.01.19 21.52	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.01.19 21.52	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.01.19 21.52	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.01.19 21.52	U	1
Total BTEX		0.00246	0.00200	mg/kg	02.01.19 21.52		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.01.19 21.52		
1,4-Difluorobenzene	540-36-3	92	%	70-130	02.01.19 21.52		



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS02**
Lab Sample Id: 613219-002

Matrix: Soil
Date Collected: 01.30.19 15.20

Date Received: 02.01.19 12.45
Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077881

Date Prep: 02.02.19 12.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.02.19 17.28	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077970

Date Prep: 02.02.19 08.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.02.19 21.43	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	02.02.19 21.43	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	02.02.19 21.43	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	02.02.19 21.43	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.02.19 21.43	
o-Terphenyl	84-15-1	97	%	70-135	02.02.19 21.43	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS02**
Lab Sample Id: 613219-002

Matrix: Soil
Date Collected: 01.30.19 15.20

Date Received: 02.01.19 12.45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3077978

Date Prep: 02.01.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.01.19 22.12	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.01.19 22.12	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	95	%	70-130	02.01.19 22.12		
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.01.19 22.12		



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS03** Matrix: Soil Date Received: 02.01.19 12.45
 Lab Sample Id: 613219-003 Date Collected: 01.30.19 15.30 Sample Depth: 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.02.19 12.00 Basis: Wet Weight
 Seq Number: 3077881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	325	5.01	mg/kg	02.02.19 17.34		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.02.19 08.00 Basis: Wet Weight
 Seq Number: 3077970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	58.0	15.0	mg/kg	02.02.19 22.03		1
Diesel Range Organics (DRO)	C10C28DRO	559	15.0	mg/kg	02.02.19 22.03		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	103	15.0	mg/kg	02.02.19 22.03		1
Total TPH	PHC635	720	15.0	mg/kg	02.02.19 22.03		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.02.19 22.03	
o-Terphenyl	84-15-1	119	%	70-135	02.02.19 22.03	



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS03**
 Lab Sample Id: 613219-003

Matrix: Soil
 Date Collected: 01.30.19 15.30

Date Received: 02.01.19 12.45
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.01.19 23.37	U	1
Toluene	108-88-3	0.0286	0.00200	mg/kg	02.01.19 23.37		1
Ethylbenzene	100-41-4	0.0311	0.00200	mg/kg	02.01.19 23.37		1
m,p-Xylenes	179601-23-1	0.130	0.00399	mg/kg	02.01.19 23.37		1
o-Xylene	95-47-6	0.0588	0.00200	mg/kg	02.01.19 23.37		1
Total Xylenes	1330-20-7	0.189	0.00200	mg/kg	02.01.19 23.37		1
Total BTEX		0.249	0.00200	mg/kg	02.01.19 23.37		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.01.19 23.37		
4-Bromofluorobenzene	460-00-4	144	%	70-130	02.01.19 23.37	**	



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS04** Matrix: Soil Date Received: 02.01.19 12.45
 Lab Sample Id: 613219-004 Date Collected: 01.30.19 15.35 Sample Depth: 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.02.19 12.00 Basis: Wet Weight
 Seq Number: 3077881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	79.8	5.01	mg/kg	02.02.19 17.41		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.02.19 08.00 Basis: Wet Weight
 Seq Number: 3077970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	162	15.0	mg/kg	02.02.19 22.22		1
Diesel Range Organics (DRO)	C10C28DRO	883	15.0	mg/kg	02.02.19 22.22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	165	15.0	mg/kg	02.02.19 22.22		1
Total TPH	PHC635	1210	15.0	mg/kg	02.02.19 22.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	107	%	70-135	02.02.19 22.22	
o-Terphenyl	84-15-1	118	%	70-135	02.02.19 22.22	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS04**
Lab Sample Id: 613219-004

Matrix: Soil
Date Collected: 01.30.19 15.35

Date Received: 02.01.19 12.45
Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.00529	0.00202	mg/kg	02.01.19 23.59		1
Toluene	108-88-3	0.112	0.00202	mg/kg	02.01.19 23.59		1
Ethylbenzene	100-41-4	0.0443	0.00202	mg/kg	02.01.19 23.59		1
m,p-Xylenes	179601-23-1	0.179	0.00403	mg/kg	02.01.19 23.59		1
o-Xylene	95-47-6	0.0830	0.00202	mg/kg	02.01.19 23.59		1
Total Xylenes	1330-20-7	0.262	0.00202	mg/kg	02.01.19 23.59		1
Total BTEX		0.424	0.00202	mg/kg	02.01.19 23.59		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	82	%	70-130	02.01.19 23.59		
4-Bromofluorobenzene	460-00-4	85	%	70-130	02.01.19 23.59		



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW01**
 Lab Sample Id: 613219-005

Matrix: Soil
 Date Collected: 01.30.19 14.00

Date Received: 02.01.19 12.45
 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077881

Date Prep: 02.02.19 12.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	770	4.96	mg/kg	02.02.19 17.47		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077970

Date Prep: 02.02.19 08.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	76.3	15.0	mg/kg	02.02.19 22.42		1
Diesel Range Organics (DRO)	C10C28DRO	583	15.0	mg/kg	02.02.19 22.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	103	15.0	mg/kg	02.02.19 22.42		1
Total TPH	PHC635	762	15.0	mg/kg	02.02.19 22.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	100	%	70-135	02.02.19 22.42	
o-Terphenyl	84-15-1	111	%	70-135	02.02.19 22.42	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW01**
 Lab Sample Id: 613219-005

Matrix: Soil
 Date Collected: 01.30.19 14.00

Date Received: 02.01.19 12.45
 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.02.19 00.20	U	1
Toluene	108-88-3	0.0512	0.00200	mg/kg	02.02.19 00.20		1
Ethylbenzene	100-41-4	0.0520	0.00200	mg/kg	02.02.19 00.20		1
m,p-Xylenes	179601-23-1	0.213	0.00400	mg/kg	02.02.19 00.20		1
o-Xylene	95-47-6	0.115	0.00200	mg/kg	02.02.19 00.20		1
Total Xylenes	1330-20-7	0.328	0.00200	mg/kg	02.02.19 00.20		1
Total BTEX		0.431	0.00200	mg/kg	02.02.19 00.20		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	147	%	70-130	02.02.19 00.20	**	
1,4-Difluorobenzene	540-36-3	85	%	70-130	02.02.19 00.20		



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW02**
 Lab Sample Id: 613219-006

Matrix: Soil
 Date Collected: 01.30.19 14.15

Date Received: 02.01.19 12.45
 Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.02.19 12.00

Basis: Wet Weight

Seq Number: 3077881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	14.9	4.99	mg/kg	02.02.19 17.53		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.02.19 08.00

Basis: Wet Weight

Seq Number: 3077970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	16.2	15.0	mg/kg	02.02.19 23.02		1
Diesel Range Organics (DRO)	C10C28DRO	177	15.0	mg/kg	02.02.19 23.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	30.8	15.0	mg/kg	02.02.19 23.02		1
Total TPH	PHC635	224	15.0	mg/kg	02.02.19 23.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	101	%	70-135	02.02.19 23.02	
o-Terphenyl	84-15-1	105	%	70-135	02.02.19 23.02	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW02**
Lab Sample Id: 613219-006

Matrix: Soil
Date Collected: 01.30.19 14.15

Date Received: 02.01.19 12.45
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.02.19 00.42	U	1
Toluene	108-88-3	0.00675	0.00201	mg/kg	02.02.19 00.42		1
Ethylbenzene	100-41-4	0.0133	0.00201	mg/kg	02.02.19 00.42		1
m,p-Xylenes	179601-23-1	0.0625	0.00402	mg/kg	02.02.19 00.42		1
o-Xylene	95-47-6	0.0454	0.00201	mg/kg	02.02.19 00.42		1
Total Xylenes	1330-20-7	0.108	0.00201	mg/kg	02.02.19 00.42		1
Total BTEX		0.128	0.00201	mg/kg	02.02.19 00.42		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	99	%	70-130	02.02.19 00.42		
4-Bromofluorobenzene	460-00-4	120	%	70-130	02.02.19 00.42		



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW03**
Lab Sample Id: 613219-007

Matrix: Soil
Date Collected: 01.30.19 14.30

Date Received: 02.01.19 12.45
Sample Depth: 0 - 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3077881

Date Prep: 02.02.19 12.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	243	4.97	mg/kg	02.02.19 17.59		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3077970

Date Prep: 02.02.19 08.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	26.3	14.9	mg/kg	02.02.19 23.22		1
Diesel Range Organics (DRO)	C10C28DRO	388	14.9	mg/kg	02.02.19 23.22		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	63.8	14.9	mg/kg	02.02.19 23.22		1
Total TPH	PHC635	478	14.9	mg/kg	02.02.19 23.22		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.02.19 23.22	
o-Terphenyl	84-15-1	103	%	70-135	02.02.19 23.22	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW03**
Lab Sample Id: 613219-007

Matrix: Soil
Date Collected: 01.30.19 14.30

Date Received: 02.01.19 12.45
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3077978

Prep Method: SW5030B

% Moisture:

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.02.19 01.03	U	1
Toluene	108-88-3	0.0134	0.00200	mg/kg	02.02.19 01.03		1
Ethylbenzene	100-41-4	0.0404	0.00200	mg/kg	02.02.19 01.03		1
m,p-Xylenes	179601-23-1	0.172	0.00399	mg/kg	02.02.19 01.03		1
o-Xylene	95-47-6	0.0703	0.00200	mg/kg	02.02.19 01.03		1
Total Xylenes	1330-20-7	0.242	0.00200	mg/kg	02.02.19 01.03		1
Total BTEX		0.296	0.00200	mg/kg	02.02.19 01.03		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	219	%	70-130	02.02.19 01.03	**	
1,4-Difluorobenzene	540-36-3	133	%	70-130	02.02.19 01.03	**	



Certificate of Analytical Results 613219

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW04** Matrix: Soil Date Received: 02.01.19 12.45
 Lab Sample Id: 613219-008 Date Collected: 01.30.19 14.45 Sample Depth: 0 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.02.19 12.00 Basis: Wet Weight
 Seq Number: 3077881

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	218	4.98	mg/kg	02.02.19 18.05		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.02.19 08.00 Basis: Wet Weight
 Seq Number: 3077970

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	104	15.0	mg/kg	02.02.19 23.42		1
Diesel Range Organics (DRO)	C10C28DRO	908	15.0	mg/kg	02.02.19 23.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	174	15.0	mg/kg	02.02.19 23.42		1
Total TPH	PHC635	1190	15.0	mg/kg	02.02.19 23.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.02.19 23.42	
o-Terphenyl	84-15-1	112	%	70-135	02.02.19 23.42	



Certificate of Analytical Results 613219



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW04**
Lab Sample Id: 613219-008

Matrix: Soil
Date Collected: 01.30.19 14.45

Date Received: 02.01.19 12.45
Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.01.19 15.00

Basis: Wet Weight

Seq Number: 3077978

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.02.19 01.24	U	1
Toluene	108-88-3	0.0308	0.00200	mg/kg	02.02.19 01.24		1
Ethylbenzene	100-41-4	0.0450	0.00200	mg/kg	02.02.19 01.24		1
m,p-Xylenes	179601-23-1	0.222	0.00401	mg/kg	02.02.19 01.24		1
o-Xylene	95-47-6	0.107	0.00200	mg/kg	02.02.19 01.24		1
Total Xylenes	1330-20-7	0.329	0.00200	mg/kg	02.02.19 01.24		1
Total BTEX		0.405	0.00200	mg/kg	02.02.19 01.24		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	169	%	70-130	02.02.19 01.24	**	
1,4-Difluorobenzene	540-36-3	116	%	70-130	02.02.19 01.24		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077881

MB Sample Id: 7670927-1-BLK

Matrix: Solid

LCS Sample Id: 7670927-1-BKS

Prep Method: E300P

Date Prep: 02.02.19

LCSD Sample Id: 7670927-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	236	94	253	101	90-110	7	20	mg/kg	02.02.19 15:00	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077881

Parent Sample Id: 613150-003

Matrix: Soil

MS Sample Id: 613150-003 S

Prep Method: E300P

Date Prep: 02.02.19

MSD Sample Id: 613150-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.49	250	264	105	271	107	90-110	3	20	mg/kg	02.02.19 15:18	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3077881

Parent Sample Id: 613218-007

Matrix: Soil

MS Sample Id: 613218-007 S

Prep Method: E300P

Date Prep: 02.02.19

MSD Sample Id: 613218-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.80	248	268	107	269	107	90-110	0	20	mg/kg	02.02.19 16:48	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3077970

MB Sample Id: 7671016-1-BLK

Matrix: Solid

LCS Sample Id: 7671016-1-BKS

Prep Method: TX1005P

Date Prep: 02.02.19

LCSD Sample Id: 7671016-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	858	86	868	87	70-135	1	20	mg/kg	02.02.19 20:05	
Diesel Range Organics (DRO)	<8.13	1000	948	95	958	96	70-135	1	20	mg/kg	02.02.19 20:05	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	104		121		122		70-135	%	02.02.19 20:05
o-Terphenyl	106		102		102		70-135	%	02.02.19 20:05

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3077970

Parent Sample Id: 613219-001

Matrix: Soil

MS Sample Id: 613219-001 S

Prep Method: TX1005P

Date Prep: 02.02.19

MSD Sample Id: 613219-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<7.99	999	813	81	836	84	70-135	3	20	mg/kg	02.02.19 21:03	
Diesel Range Organics (DRO)	<8.12	999	907	91	940	94	70-135	4	20	mg/kg	02.02.19 21:03	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	124		126		70-135	%	02.02.19 21:03
o-Terphenyl	119		110		70-135	%	02.02.19 21:03

Analytical Method: BTEX by EPA 8021B

Seq Number: 3077978

MB Sample Id: 7670964-1-BLK

Matrix: Solid

LCS Sample Id: 7670964-1-BKS

Prep Method: SW5030B

Date Prep: 02.01.19

LCSD Sample Id: 7670964-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0888	89	0.0920	91	70-130	4	35	mg/kg	02.01.19 16:53	
Toluene	<0.00200	0.0998	0.0800	80	0.0794	79	70-130	1	35	mg/kg	02.01.19 16:53	
Ethylbenzene	<0.00200	0.0998	0.0875	88	0.0888	88	70-130	1	35	mg/kg	02.01.19 16:53	
m,p-Xylenes	<0.00399	0.200	0.172	86	0.178	89	70-130	3	35	mg/kg	02.01.19 16:53	
o-Xylene	<0.00200	0.0998	0.0795	80	0.0817	81	70-130	3	35	mg/kg	02.01.19 16:53	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	88		113		114		70-130	%	02.01.19 16:53
4-Bromofluorobenzene	89		96		98		70-130	%	02.01.19 16:53

Analytical Method: BTEX by EPA 8021B

Seq Number: 3077978

Parent Sample Id: 613218-001

Matrix: Soil

MS Sample Id: 613218-001 S

Prep Method: SW5030B

Date Prep: 02.01.19

MSD Sample Id: 613218-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.0744	74	0.0693	69	70-130	7	35	mg/kg	02.01.19 17:37	X
Toluene	<0.00202	0.101	0.0556	55	0.0538	54	70-130	3	35	mg/kg	02.01.19 17:37	X
Ethylbenzene	<0.00202	0.101	0.0624	62	0.0621	62	70-130	0	35	mg/kg	02.01.19 17:37	X
m,p-Xylenes	0.00271	0.202	0.126	61	0.120	58	70-130	5	35	mg/kg	02.01.19 17:37	X
o-Xylene	<0.00202	0.101	0.0566	56	0.0568	57	70-130	0	35	mg/kg	02.01.19 17:37	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	121		115		70-130	%	02.01.19 17:37
4-Bromofluorobenzene	119		90		70-130	%	02.01.19 17:37

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Setting the Standard since 1990
Stafford, Texas (281-240-4200)
Dallas Texas (214-902-0300)

San Antonio, Texas (210-509-3334)
Midland, Texas (432-704-5251)

Phoenix, Arizona (480-355-0900)

CHAIN OF C STUDY

Page 1 of 1

Client / Reporting Information						Project Information						Analytical Information						Matrix Codes											
Company Name / Branch: L.T. Fairman et al., Inc.						Project Name/Number: PLU 430 Battery																							
Company Address: 3300 W# St. Building Unit 103 Midland, TX 79702						Project Location: Eddy County ARPSICD																							
Email: lab@lts.com Lab@LTS.com (432) 704-5778						Invoice To: XTO: Kyle Littrell																							
Project Contact: Adrian Baker						PO Number:																							
Sampler's Name: Anne Byers																													
No. Field ID / Point of Collection																													
Sample Depth						Date						Time						Matrix											
1 FSO1						4'						1/30						1515 S 1						BTEX (only BTEX) 8021					
2 FSO2						4'						1/30						1520 S 1						TPH/DRO GLO MPO 8015					
3 FSO3						4'						1/30						1530 S 1						Chloride (300.00)					
4 FSO4						4'						1/30						1535 S 1											
5 SWO1						0-4'						1/30						1400 S 1											
6 SWO2						0-4'						1/30						1415 S 1											
7 SWO3						0-4'						1/30						1430 S 1											
8 SWO4						0-4'						1/30						1445 S 1											
9																													
10																													
Turnaround Time (Business days)																													
☒ Same Day TAT						☐ 5 Day TAT						☐ Level II Std QC						☐ Level IV (Full Data Pkg /raw data)											
☐ Next Day EMERGENCY						☐ 7 Day TAT						☐ Level III Std QC+ Forms						☐ TRRP Level IV											
☐ 2 Day EMERGENCY						☐ Contract TAT						☐ Level 3 (CLP Forms)						☐ UST /RG -411											
☐ 3 Day EMERGENCY												☐ TRRP Checklist																	
TAT Starts Day received by Lab, if received by 5:00 pm																													
Relinquished by Sampler:						SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION, INCLUDING COURIER DELIVERY																							
1 Anne Byers						Date Time: 1/31/19 1500						Received By: [Signature]						Relinquished By: [Signature]						Date Time: 1/31/19 1530					
Relinquished by:						Date Time:						Received By:						Relinquished By:						Date Time:					
3																													
Relinquished by:						Date Time:						Received By:						Relinquished By:						Date Time:					
5																													
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75 will be applied to each project. Xenco's liability will be limited to the cost of samples. Any samples received by Xenco but not analyzed will be invoiced at \$5 per sample. These terms will be enforced unless previously negotiated under a fully executed client contract.																													
On Ice						Cooler Temp.						Thermo Corr. Factor																	
Y						3.6						3.5						R2 -0.1											

7743 6505 4577



Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/01/2019 12:45:00 PM

Work Order #: 613219

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 02/01/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/01/2019

Analytical Report 613312

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

05-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



05-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **613312**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 613312. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 613312 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 613312****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS05	S	01-31-19 11:50	2.5 ft	613312-001
FS06	S	01-31-19 12:00	2.5 ft	613312-002
FS07	S	01-31-19 12:15	2.5 ft	613312-003
FS08	S	01-31-19 12:30	2.5 ft	613312-004
FS09	S	01-31-19 12:35	2.5 ft	613312-005
SW05	S	01-31-19 12:45	0 - 2.5 ft	613312-006
SW06	S	01-31-19 12:50	0 - 2.5 ft	613312-007

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: PLU 420 Battery**Project ID: 012918193
Work Order Number(s): 613312Report Date: 05-FEB-19
Date Received: 02/04/2019

Sample receipt non conformances and comments:None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3078004 Inorganic Anions by EPA 300

Lab Sample ID 613312-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference. Samples in the analytical batch are: 613312-001, -002, -003, -004, -005, -006, -007.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3078044 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected.

Samples affected are: 613312-001,613312-006,613312-005.



Certificate of Analysis Summary 613312

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Mon Feb-04-19 08:00 am
Report Date: 05-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	613312-001	613312-002	613312-003	613312-004	613312-005	613312-006
	<i>Field Id:</i>	FS05	FS06	FS07	FS08	FS09	SW05
	<i>Depth:</i>	2.5- ft	2.5- ft	2.5- ft	2.5- ft	2.5- ft	0-2.5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Jan-31-19 11:50	Jan-31-19 12:00	Jan-31-19 12:15	Jan-31-19 12:30	Jan-31-19 12:35	Jan-31-19 12:45
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00
	<i>Analyzed:</i>	Feb-04-19 19:26	Feb-04-19 19:48	Feb-04-19 20:09	Feb-04-19 20:31	Feb-04-19 20:52	Feb-04-19 21:35
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00201 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	<0.00200 0.00200	0.00595 0.00201
Ethylbenzene		0.0145 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	0.00945 0.00200	0.0439 0.00201
m,p-Xylenes		0.0372 0.00402	<0.00400 0.00400	<0.00401 0.00401	<0.00398 0.00398	0.0257 0.00400	0.127 0.00402
o-Xylene		0.0113 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	0.0222 0.00200	0.0748 0.00201
Total Xylenes		0.0485 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	0.0479 0.00200	0.202 0.00201
Total BTEX		0.0630 0.00201	<0.00200 0.00200	<0.00200 0.00200	<0.00199 0.00199	0.0574 0.00200	0.252 0.00201
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-04-19 15:00	Feb-04-19 15:00	Feb-04-19 15:00	Feb-04-19 15:00	Feb-04-19 15:00	Feb-04-19 15:00
	<i>Analyzed:</i>	Feb-04-19 20:19	Feb-04-19 20:25	Feb-04-19 20:31	Feb-04-19 20:50	Feb-04-19 20:37	Feb-04-19 20:44
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		39.2 4.98	293 4.97	1030 5.00	664 5.00	1520 25.0	1930 24.8
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00	Feb-04-19 11:00
	<i>Analyzed:</i>	Feb-04-19 16:02	Feb-04-19 16:22	Feb-04-19 16:42	Feb-04-19 17:02	Feb-04-19 17:21	Feb-04-19 18:20
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		17.9 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	15.6 15.0	52.5 15.0
Diesel Range Organics (DRO)		265 14.9	<15.0 15.0	31.2 15.0	18.8 15.0	157 15.0	476 15.0
Motor Oil Range Hydrocarbons (MRO)		44.8 14.9	<15.0 15.0	<15.0 15.0	<15.0 15.0	22.8 15.0	88.7 15.0
Total TPH		328 14.9	<15.0 15.0	31.2 15.0	18.8 15.0	195 15.0	617 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 613312

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Mon Feb-04-19 08:00 am
Report Date: 05-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	613312-007					
	Field Id:	SW06					
	Depth:	0-2.5 ft					
	Matrix:	SOIL					
	Sampled:	Jan-31-19 12:50					
BTEX by EPA 8021B	Extracted:	Feb-04-19 11:00					
	Analyzed:	Feb-04-19 21:13					
	Units/RL:	mg/kg RL					
Benzene		0.0204 0.00202					
Toluene		0.316 0.00202					
Ethylbenzene		0.0859 0.00202					
m,p-Xylenes		0.457 0.00403					
o-Xylene		0.183 0.00202					
Total Xylenes		0.640 0.00202					
Total BTEX		1.06 0.00202					
Inorganic Anions by EPA 300	Extracted:	Feb-04-19 15:00					
	Analyzed:	Feb-04-19 21:08					
	Units/RL:	mg/kg RL					
Chloride		5700 49.7					
TPH by SW8015 Mod	Extracted:	Feb-04-19 11:00					
	Analyzed:	Feb-04-19 18:40					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		392 15.0					
Diesel Range Organics (DRO)		1160 15.0					
Motor Oil Range Hydrocarbons (MRO)		184 15.0					
Total TPH		1740 15.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Jessica Kramer
Project Assistant



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS05**
Lab Sample Id: 613312-001

Matrix: Soil
Date Collected: 01.31.19 11.50

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078004

Date Prep: 02.04.19 15.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	39.2	4.98	mg/kg	02.04.19 20.19		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078102

Date Prep: 02.04.19 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	17.9	14.9	mg/kg	02.04.19 16.02		1
Diesel Range Organics (DRO)	C10C28DRO	265	14.9	mg/kg	02.04.19 16.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	44.8	14.9	mg/kg	02.04.19 16.02		1
Total TPH	PHC635	328	14.9	mg/kg	02.04.19 16.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	02.04.19 16.02	
o-Terphenyl	84-15-1	97	%	70-135	02.04.19 16.02	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS05**
Lab Sample Id: 613312-001

Matrix: Soil
Date Collected: 01.31.19 11.50

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.04.19 11.00

Basis: Wet Weight

Seq Number: 3078044

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.19 19.26	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.04.19 19.26	U	1
Ethylbenzene	100-41-4	0.0145	0.00201	mg/kg	02.04.19 19.26		1
m,p-Xylenes	179601-23-1	0.0372	0.00402	mg/kg	02.04.19 19.26		1
o-Xylene	95-47-6	0.0113	0.00201	mg/kg	02.04.19 19.26		1
Total Xylenes	1330-20-7	0.0485	0.00201	mg/kg	02.04.19 19.26		1
Total BTEX		0.0630	0.00201	mg/kg	02.04.19 19.26		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	163	%	70-130	02.04.19 19.26	**	
1,4-Difluorobenzene	540-36-3	124	%	70-130	02.04.19 19.26		



Certificate of Analytical Results 613312

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS06** Matrix: Soil Date Received: 02.04.19 08.00
 Lab Sample Id: 613312-002 Date Collected: 01.31.19 12.00 Sample Depth: 2.5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.04.19 15.00 Basis: Wet Weight
 Seq Number: 3078004

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	293	4.97	mg/kg	02.04.19 20.25		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.04.19 11.00 Basis: Wet Weight
 Seq Number: 3078102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.04.19 16.22	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.04.19 16.22	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.04.19 16.22	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.04.19 16.22	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	86	%	70-135	02.04.19 16.22	
o-Terphenyl	84-15-1	87	%	70-135	02.04.19 16.22	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS06**
Lab Sample Id: 613312-002

Matrix: Soil
Date Collected: 01.31.19 12.00

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078044

Date Prep: 02.04.19 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.04.19 19.48	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.19 19.48	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	101	%	70-130	02.04.19 19.48		
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.04.19 19.48		



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS07**
Lab Sample Id: 613312-003

Matrix: Soil
Date Collected: 01.31.19 12.15

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078004

Date Prep: 02.04.19 15.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1030	5.00	mg/kg	02.04.19 20.31		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078102

Date Prep: 02.04.19 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.04.19 16.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	31.2	15.0	mg/kg	02.04.19 16.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.04.19 16.42	U	1
Total TPH	PHC635	31.2	15.0	mg/kg	02.04.19 16.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.04.19 16.42	
o-Terphenyl	84-15-1	102	%	70-135	02.04.19 16.42	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS07**
Lab Sample Id: 613312-003

Matrix: Soil
Date Collected: 01.31.19 12.15

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078044

Date Prep: 02.04.19 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.04.19 20.09	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.04.19 20.09	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	116	%	70-130	02.04.19 20.09		
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.04.19 20.09		



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS08**
Lab Sample Id: 613312-004

Matrix: Soil
Date Collected: 01.31.19 12.30

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078004

Date Prep: 02.04.19 15.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	664	5.00	mg/kg	02.04.19 20.50		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078102

Date Prep: 02.04.19 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.04.19 17.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	18.8	15.0	mg/kg	02.04.19 17.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.04.19 17.02	U	1
Total TPH	PHC635	18.8	15.0	mg/kg	02.04.19 17.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	90	%	70-135	02.04.19 17.02	
o-Terphenyl	84-15-1	91	%	70-135	02.04.19 17.02	



Certificate of Analytical Results 613312

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS08**
 Lab Sample Id: 613312-004

Matrix: Soil
 Date Collected: 01.31.19 12.30

Date Received: 02.04.19 08.00
 Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078044

Date Prep: 02.04.19 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.04.19 20.31	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.04.19 20.31	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.04.19 20.31		
1,4-Difluorobenzene	540-36-3	83	%	70-130	02.04.19 20.31		



Certificate of Analytical Results 613312

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS09**
 Lab Sample Id: 613312-005

Matrix: Soil
 Date Collected: 01.31.19 12.35

Date Received: 02.04.19 08.00
 Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078004

Date Prep: 02.04.19 15.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1520	25.0	mg/kg	02.04.19 20.37		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078102

Date Prep: 02.04.19 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	15.6	15.0	mg/kg	02.04.19 17.21		1
Diesel Range Organics (DRO)	C10C28DRO	157	15.0	mg/kg	02.04.19 17.21		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	22.8	15.0	mg/kg	02.04.19 17.21		1
Total TPH	PHC635	195	15.0	mg/kg	02.04.19 17.21		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.04.19 17.21	
o-Terphenyl	84-15-1	95	%	70-135	02.04.19 17.21	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS09**
Lab Sample Id: 613312-005

Matrix: Soil
Date Collected: 01.31.19 12.35

Date Received: 02.04.19 08.00
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.04.19 11.00

Basis: Wet Weight

Seq Number: 3078044

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.04.19 20.52	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.04.19 20.52	U	1
Ethylbenzene	100-41-4	0.00945	0.00200	mg/kg	02.04.19 20.52		1
m,p-Xylenes	179601-23-1	0.0257	0.00400	mg/kg	02.04.19 20.52		1
o-Xylene	95-47-6	0.0222	0.00200	mg/kg	02.04.19 20.52		1
Total Xylenes	1330-20-7	0.0479	0.00200	mg/kg	02.04.19 20.52		1
Total BTEX		0.0574	0.00200	mg/kg	02.04.19 20.52		1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	142		%	70-130	02.04.19 20.52	**
1,4-Difluorobenzene	540-36-3	101		%	70-130	02.04.19 20.52	



Certificate of Analytical Results 613312

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW05** Matrix: Soil Date Received: 02.04.19 08.00
 Lab Sample Id: 613312-006 Date Collected: 01.31.19 12.45 Sample Depth: 0 - 2.5 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.04.19 15.00 Basis: Wet Weight
 Seq Number: 3078004

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1930	24.8	mg/kg	02.04.19 20.44		5

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.04.19 11.00 Basis: Wet Weight
 Seq Number: 3078102

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	52.5	15.0	mg/kg	02.04.19 18.20		1
Diesel Range Organics (DRO)	C10C28DRO	476	15.0	mg/kg	02.04.19 18.20		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	88.7	15.0	mg/kg	02.04.19 18.20		1
Total TPH	PHC635	617	15.0	mg/kg	02.04.19 18.20		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.04.19 18.20	
o-Terphenyl	84-15-1	105	%	70-135	02.04.19 18.20	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW05**
Lab Sample Id: 613312-006

Matrix: Soil
Date Collected: 01.31.19 12.45

Date Received: 02.04.19 08.00
Sample Depth: 0 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078044

Date Prep: 02.04.19 11.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.04.19 21.35	U	1
Toluene	108-88-3	0.00595	0.00201	mg/kg	02.04.19 21.35		1
Ethylbenzene	100-41-4	0.0439	0.00201	mg/kg	02.04.19 21.35		1
m,p-Xylenes	179601-23-1	0.127	0.00402	mg/kg	02.04.19 21.35		1
o-Xylene	95-47-6	0.0748	0.00201	mg/kg	02.04.19 21.35		1
Total Xylenes	1330-20-7	0.202	0.00201	mg/kg	02.04.19 21.35		1
Total BTEX		0.252	0.00201	mg/kg	02.04.19 21.35		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	127	%	70-130	02.04.19 21.35		
4-Bromofluorobenzene	460-00-4	215	%	70-130	02.04.19 21.35	**	



Certificate of Analytical Results 613312

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW06**
 Lab Sample Id: 613312-007

Matrix: Soil
 Date Collected: 01.31.19 12.50

Date Received: 02.04.19 08.00
 Sample Depth: 0 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078004

Date Prep: 02.04.19 15.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5700	49.7	mg/kg	02.04.19 21.08		10

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078102

Date Prep: 02.04.19 11.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	392	15.0	mg/kg	02.04.19 18.40		1
Diesel Range Organics (DRO)	C10C28DRO	1160	15.0	mg/kg	02.04.19 18.40		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	184	15.0	mg/kg	02.04.19 18.40		1
Total TPH	PHC635	1740	15.0	mg/kg	02.04.19 18.40		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	113	%	70-135	02.04.19 18.40	
o-Terphenyl	84-15-1	118	%	70-135	02.04.19 18.40	



Certificate of Analytical Results 613312



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW06**
Lab Sample Id: 613312-007

Matrix: Soil
Date Collected: 01.31.19 12.50

Date Received: 02.04.19 08.00
Sample Depth: 0 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.04.19 11.00

Basis: Wet Weight

Seq Number: 3078044

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0204	0.00202	mg/kg	02.04.19 21.13		1
Toluene	108-88-3	0.316	0.00202	mg/kg	02.04.19 21.13		1
Ethylbenzene	100-41-4	0.0859	0.00202	mg/kg	02.04.19 21.13		1
m,p-Xylenes	179601-23-1	0.457	0.00403	mg/kg	02.04.19 21.13		1
o-Xylene	95-47-6	0.183	0.00202	mg/kg	02.04.19 21.13		1
Total Xylenes	1330-20-7	0.640	0.00202	mg/kg	02.04.19 21.13		1
Total BTEX		1.06	0.00202	mg/kg	02.04.19 21.13		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	113	%	70-130	02.04.19 21.13		
1,4-Difluorobenzene	540-36-3	91	%	70-130	02.04.19 21.13		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078004

MB Sample Id: 7671027-1-BLK

Matrix: Solid

LCS Sample Id: 7671027-1-BKS

Prep Method: E300P

Date Prep: 02.04.19

LCSD Sample Id: 7671027-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	256	102	262	105	90-110	2	20	mg/kg	02.04.19 19:08	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078004

Parent Sample Id: 613311-001

Matrix: Soil

MS Sample Id: 613311-001 S

Prep Method: E300P

Date Prep: 02.04.19

MSD Sample Id: 613311-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	278	249	513	94	531	102	90-110	3	20	mg/kg	02.04.19 19:26	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078004

Parent Sample Id: 613312-004

Matrix: Soil

MS Sample Id: 613312-004 S

Prep Method: E300P

Date Prep: 02.04.19

MSD Sample Id: 613312-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	664	250	943	112	927	105	90-110	2	20	mg/kg	02.04.19 20:56	X

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078102

MB Sample Id: 7671081-1-BLK

Matrix: Solid

LCS Sample Id: 7671081-1-BKS

Prep Method: TX1005P

Date Prep: 02.04.19

LCSD Sample Id: 7671081-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	826	83	951	95	70-135	14	20	mg/kg	02.04.19 13:04	
Diesel Range Organics (DRO)	<8.13	1000	918	92	1070	107	70-135	15	20	mg/kg	02.04.19 13:04	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	102		119		125		70-135	%	02.04.19 13:04
o-Terphenyl	104		115		127		70-135	%	02.04.19 13:04

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078102

Parent Sample Id: 613311-001

Matrix: Soil

MS Sample Id: 613311-001 S

Prep Method: TX1005P

Date Prep: 02.04.19

MSD Sample Id: 613311-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	13.6	999	827	81	849	84	70-135	3	20	mg/kg	02.04.19 14:03	
Diesel Range Organics (DRO)	<8.12	999	867	87	885	89	70-135	2	20	mg/kg	02.04.19 14:03	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	113		115		70-135	%	02.04.19 14:03
o-Terphenyl	110		111		70-135	%	02.04.19 14:03

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078044

MB Sample Id: 7671062-1-BLK

Matrix: Solid

LCS Sample Id: 7671062-1-BKS

Prep Method: SW5030B

Date Prep: 02.04.19

LCSD Sample Id: 7671062-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0996	0.107	107	0.111	111	70-130	4	35	mg/kg	02.04.19 09:33	
Toluene	<0.00199	0.0996	0.0879	88	0.0880	88	70-130	0	35	mg/kg	02.04.19 09:33	
Ethylbenzene	<0.00199	0.0996	0.101	101	0.108	108	70-130	7	35	mg/kg	02.04.19 09:33	
m,p-Xylenes	<0.00398	0.199	0.201	101	0.223	112	70-130	10	35	mg/kg	02.04.19 09:33	
o-Xylene	<0.00199	0.0996	0.0886	89	0.0964	96	70-130	8	35	mg/kg	02.04.19 09:33	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	83		109		112		70-130	%	02.04.19 09:33
4-Bromofluorobenzene	93		99		107		70-130	%	02.04.19 09:33

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078044

Parent Sample Id: 613340-001

Matrix: Soil

MS Sample Id: 613340-001 S

Prep Method: SW5030B

Date Prep: 02.04.19

MSD Sample Id: 613340-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.0676	68	0.0744	75	70-130	10	35	mg/kg	02.04.19 12:39	X
Toluene	<0.00199	0.0994	0.0546	55	0.0622	62	70-130	13	35	mg/kg	02.04.19 12:39	X
Ethylbenzene	<0.00199	0.0994	0.0672	68	0.0762	76	70-130	13	35	mg/kg	02.04.19 12:39	X
m,p-Xylenes	<0.00398	0.199	0.130	65	0.141	71	70-130	8	35	mg/kg	02.04.19 12:39	X
o-Xylene	<0.00199	0.0994	0.0588	59	0.0676	68	70-130	14	35	mg/kg	02.04.19 12:39	X

Surrogate

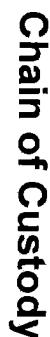
	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	127		119		70-130	%	02.04.19 12:39
4-Bromofluorobenzene	98		103		70-130	%	02.04.19 12:39

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Work Order No: 213512

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) El Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296
Phoenix, AZ (602-352-7550) Atlanta, GA (770-449-8800) Tampa, FL (813) 281-3333
Hobbs, NM (575-392-7550)

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Work Order Comments									
Program: UST/PST		☐ RP	☐ Rowfields	☐ C	☐ perfund	☐			
State of Project:									
Reporting Level II		☐ Level III	☐ ST/UST	☐ RP	☐ Mel IV	☐			
Deliverables: EDD		☐	ADAPT	☐	Other:				

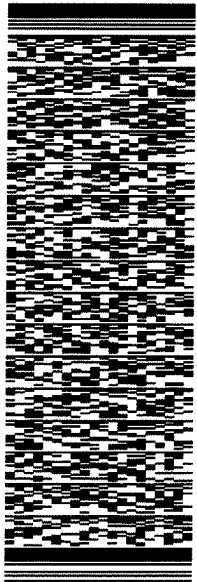
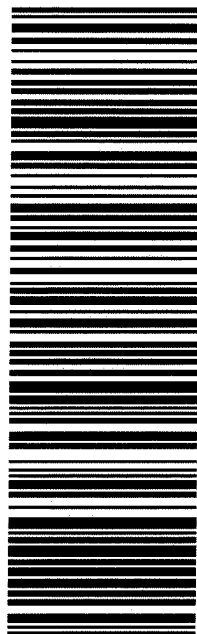
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Total	200.7 / 6010	200.8 / 6020:	Circle Method(s) and Metal(s) to be analyzed
8RCRA	13PPM	Texas 11	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Ti Sn U V Zn
			TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
			1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document representing relinquishment of samples constitutes a valid purchase order from client company to Xenoco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 service. Xenoco will be liable only for the cost of samples and a charge of \$3 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated. A minimum charge of \$75.00 will be applied to each project and a charge of \$3 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Donna Page</i>	<i>Bob. H.</i>	2/1/96 13:30	2 <i>Donna Page</i>	<i>Bob. H.</i>	2/1/96 13:30
3	<i>Bob. H.</i>	2/1/96 0800	4	<i>Bob. H.</i>	2/1/96 13:30
5			6		

ORIGIN ID:CAOA (575) 887-6245		SHIP DATE: 01FEB19	
XENCO SATURDAY		ACTWGT: 38.00 LB	
PAC N MAIL		CAD: 101813/06NET4100	
910 W PIERCE ST		DMS: 26x14x15 IN	
CARLSBAD, NM 88220		BILL RECIPIENT	
UNITED STATES US			
TO HOLD FOR XENCO			
FEDEX OFFICE PRINT & SHIP CENTER			
FEDEX OFFICE PRINT & SHIP CENTER			
200 W INTERSTATE 20			
MIDLAND TX 79701			
(806) 674-0639		REF: XENCO	
INV:		DEPT:	
PO:			

TRK#	7743 7545 7990	SATURDAY HOLD
0201		PRIORITY OVERNIGHT
41 MAF-A		HLD
		MAFKI
		LBB
		TX-US

565J20E3D/23AD

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1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

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Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/04/2019 08:00:00 AM

Work Order #: 613312

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 02/04/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/04/2019

Analytical Report 614002

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

12-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429)

Xenco-Lakeland: Florida (E84098)



12-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **614002**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 614002. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 614002 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America



Sample Cross Reference 614002

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH11	S	02-05-19 16:10	4 ft	614002-001



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420 Battery

Project ID: 012918193

Work Order Number(s): 614002

Report Date: 12-FEB-19

Date Received: 02/08/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3078719 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 614002

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 12-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	614002-001					
	Field Id:	PH11					
	Depth:	4- ft					
	Matrix:	SOIL					
	Sampled:	Feb-05-19 16:10					
BTEX by EPA 8021B	Extracted:	Feb-08-19 15:00					
	Analyzed:	Feb-11-19 11:24					
	Units/RL:	mg/kg RL					
Benzene		<0.00200 0.00200					
Toluene		<0.00200 0.00200					
Ethylbenzene		<0.00200 0.00200					
m,p-Xylenes		<0.00400 0.00400					
o-Xylene		<0.00200 0.00200					
Total Xylenes		<0.00200 0.00200					
Total BTEX		<0.00200 0.00200					
Inorganic Anions by EPA 300	Extracted:	Feb-08-19 13:00					
	Analyzed:	Feb-08-19 18:49					
	Units/RL:	mg/kg RL					
Chloride		118 4.95					
TPH by SW8015 Mod	Extracted:	Feb-08-19 16:00					
	Analyzed:	Feb-08-19 22:14					
	Units/RL:	mg/kg RL					
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0					
Diesel Range Organics (DRO)		<15.0 15.0					
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0					
Total TPH		<15.0 15.0					

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 614002



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH11**
Lab Sample Id: 614002-001

Matrix: Soil
Date Collected: 02.05.19 16.10

Date Received: 02.08.19 12.45
Sample Depth: 4 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	118	4.95	mg/kg	02.08.19 18.49		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.08.19 22.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.08.19 22.14	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.08.19 22.14	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.08.19 22.14	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	102	%	70-135	02.08.19 22.14	
o-Terphenyl	84-15-1	103	%	70-135	02.08.19 22.14	



Certificate of Analytical Results 614002

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH11**
 Lab Sample Id: 614002-001

Matrix: Soil
 Date Collected: 02.05.19 16.10

Date Received: 02.08.19 12.45
 Sample Depth: 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.11.19 11.24	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 11.24	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.11.19 11.24		
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.11.19 11.24		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

****** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

***** (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

MB Sample Id: 7671458-1-BLK

Matrix: Solid

LCS Sample Id: 7671458-1-BKS

Prep Method: E300P

Date Prep: 02.08.19

LCSD Sample Id: 7671458-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	230	92	233	93	90-110	1	20	mg/kg	02.08.19 17:26	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

Parent Sample Id: 614001-001

Matrix: Soil

MS Sample Id: 614001-001 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614001-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	486	252	716	91	714	90	90-110	0	20	mg/kg	02.08.19 17:45	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

Parent Sample Id: 614003-004

Matrix: Soil

MS Sample Id: 614003-004 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614003-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.2	250	273	95	291	102	90-110	6	20	mg/kg	02.08.19 19:14	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

MB Sample Id: 7671417-1-BLK

Matrix: Solid

LCS Sample Id: 7671417-1-BKS

Prep Method: TX1005P

Date Prep: 02.08.19

LCSD Sample Id: 7671417-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	936	94	891	89	70-135	5	20	mg/kg	02.08.19 21:33	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	966	97	70-135	10	20	mg/kg	02.08.19 21:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		129		130		70-135	%	02.08.19 21:33
o-Terphenyl	100		122		123		70-135	%	02.08.19 21:33

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C-A) / B$
 $RPD = 200 * |(C-E) / (C+E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

Parent Sample Id: 614002-001

Matrix: Soil

MS Sample Id: 614002-001 S

Prep Method: TX1005P

Date Prep: 02.08.19

MSD Sample Id: 614002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	13.9	997	913	90	817	80	70-135	11	20	mg/kg	02.08.19 22:34	
Diesel Range Organics (DRO)	<8.10	997	1010	101	889	89	70-135	13	20	mg/kg	02.08.19 22:34	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		123		70-135	%	02.08.19 22:34
o-Terphenyl	126		117		70-135	%	02.08.19 22:34

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078719

MB Sample Id: 7671479-1-BLK

Matrix: Solid

LCS Sample Id: 7671479-1-BKS

Prep Method: SW5030B

Date Prep: 02.08.19

LCSD Sample Id: 7671479-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.119	119	0.117	116	70-130	2	35	mg/kg	02.11.19 09:17	
Toluene	<0.00200	0.0998	0.102	102	0.0998	99	70-130	2	35	mg/kg	02.11.19 09:17	
Ethylbenzene	<0.00200	0.0998	0.124	124	0.123	122	70-130	1	35	mg/kg	02.11.19 09:17	
m,p-Xylenes	<0.00399	0.200	0.244	122	0.243	121	70-130	0	35	mg/kg	02.11.19 09:17	
o-Xylene	<0.00200	0.0998	0.116	116	0.115	114	70-130	1	35	mg/kg	02.11.19 09:17	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		116		126		70-130	%	02.11.19 09:17
4-Bromofluorobenzene	84		96		87		70-130	%	02.11.19 09:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078719

Parent Sample Id: 614002-001

Matrix: Soil

MS Sample Id: 614002-001 S

Prep Method: SW5030B

Date Prep: 02.08.19

MSD Sample Id: 614002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0970	97	0.0868	87	70-130	11	35	mg/kg	02.11.19 09:59	
Toluene	<0.00200	0.100	0.0853	85	0.0778	78	70-130	9	35	mg/kg	02.11.19 09:59	
Ethylbenzene	<0.00200	0.100	0.0878	88	0.0803	81	70-130	9	35	mg/kg	02.11.19 09:59	
m,p-Xylenes	<0.00401	0.200	0.165	83	0.147	74	70-130	12	35	mg/kg	02.11.19 09:59	
o-Xylene	<0.00200	0.100	0.0789	79	0.0731	74	70-130	8	35	mg/kg	02.11.19 09:59	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		107		70-130	%	02.11.19 09:59
4-Bromofluorobenzene	89		90		70-130	%	02.11.19 09:59

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* |(C-E) / (C+E)|
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



Chain of Custody

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334

Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:	3300 North A Street	Address:	3104 E Ardene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad, NM 88220
Phone:	432.704.5178 & 575.200.6754	Email:	abaker@ltenv.com & abakers@ltenv.com

Work Order Comments									
Program: UST/PST ☐ RP ☐ Rowfields ☐ C ☐ perfund ☐									
State of Project:									
Reporting Level: II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐									
Deliverables: EDD ☐ ADAPT ☐ Other:									

[illegible]

Total 200.7 / 6010 200.8 / 6020;
Circle Method(s) and Metal(s) to be

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo
TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

Na Sr Tl Sn U V Zn
1631 / 245.1 / 7470 / 7471 : Hg

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 Xenoco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenoco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 Anne Byers		2/7/19 10:35	2 		2/8/19 1245
3			4		
5			6		



Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/08/2019 12:45:00 PM

Work Order #: 614002

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 02/08/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/11/2019

Analytical Report 614003

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

18-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)

Xenco-Lakeland: Florida (E84098)



18-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **614003**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 614003. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 614003 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

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**Sample Cross Reference 614003****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
FS10	S	02-05-19 11:00	2.5 ft	614003-001
FS11	S	02-05-19 11:15	2.5 ft	614003-002
FS12	S	02-05-19 11:20	2.5 ft	614003-003
FS13	S	02-05-19 11:30	2.5 ft	614003-004
SW07	S	02-05-19 13:20	0 - 4 ft	614003-005
FS04A	S	02-05-19 13:30	4.5 ft	614003-006
PH12	S	02-05-19 11:45	4.5 ft	614003-007
SW08	S	02-05-19 14:00	0 - 2.5 ft	614003-008
SW09	S	02-05-19 14:10	0 - 3 ft	614003-009
SW10	S	02-06-19 14:40	0 - 2.5 ft	614003-010
SW11	S	02-06-19 14:45	0 - 2 ft	614003-011
FS14	S	02-06-19 14:30	1 - 2.5 ft	614003-012
FS15	S	02-06-19 14:35	1 - 2.5 ft	614003-013

**CASE NARRATIVE****Client Name: LT Environmental, Inc.****Project Name: PLU 420 Battery**Project ID: 012918193
Work Order Number(s): 614003Report Date: 18-FEB-19
Date Received: 02/08/2019**Sample receipt non conformances and comments:**

PER CLIENTS EMAIL, CORRECTED SAMPLE NAMES. NEW VERSION GENERATED. JK
02/18/19
FS21 - FS14
FS22 - FS15

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3078596 TPH by SW8015 Mod

Surrogate o-Terphenyl recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 614003-009,614003-012,614003-011,614003-010.

Batch: LBA-3078639 Inorganic Anions by EPA 300

Lab Sample ID 614003-004 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD). Nitrate as N Relative Percent Difference (RPD) between matrix spike and duplicate was above quality control limits.

Samples in the analytical batch are: 614003-001, -002, -003, -004, -005, -006, -007, -008, -009, -010, -011, -012

Outlier/s are due to possible matrix interference.

Batch: LBA-3078719 BTEX by EPA 8021B

Surrogate 4-Bromofluorobenzene recovered above QC limits. Matrix interferences is suspected; data confirmed by re-analysis.

Samples affected are: 614003-004,614003-009,614003-011.

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 614003

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 18-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	614003-001	614003-002	614003-003	614003-004	614003-005	614003-006
	Field Id:	FS10	FS11	FS12	FS13	SW07	FS04A
	Depth:	2.5- ft	2.5- ft	2.5- ft	2.5- ft	0-4 ft	4.5- ft
	Matrix:	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	Sampled:	Feb-05-19 11:00	Feb-05-19 11:15	Feb-05-19 11:20	Feb-05-19 11:30	Feb-05-19 13:20	Feb-05-19 13:30
BTEX by EPA 8021B	Extracted:	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00
	Analyzed:	Feb-11-19 11:45	Feb-11-19 12:06	Feb-11-19 12:28	Feb-12-19 10:14	Feb-11-19 12:49	Feb-11-19 13:11
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.108 0.100	<0.00200 0.00200	<0.00201 0.00201
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	0.475 0.100	<0.00200 0.00200	<0.00201 0.00201
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	5.67 0.100	<0.00200 0.00200	<0.00201 0.00201
m,p-Xylenes		<0.00403 0.00403	<0.00399 0.00399	0.00517 0.00400	1.11 0.200	<0.00399 0.00399	<0.00402 0.00402
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	0.00288 0.00200	0.253 0.100	0.00428 0.00200	<0.00201 0.00201
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	0.00805 0.00200	1.36 0.100	0.00428 0.00200	<0.00201 0.00201
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	0.00805 0.00200	7.62 0.100	0.00428 0.00200	<0.00201 0.00201
Inorganic Anions by EPA 300	Extracted:	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00
	Analyzed:	Feb-08-19 18:56	Feb-08-19 19:02	Feb-08-19 19:27	Feb-08-19 19:08	Feb-08-19 19:33	Feb-08-19 19:54
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		362 4.95	1390 24.8	4640 24.8	35.2 5.00	771 5.00	10.9 5.00
TPH by SW8015 Mod	Extracted:	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00
	Analyzed:	Feb-08-19 23:14	Feb-08-19 23:34	Feb-08-19 23:55	Feb-09-19 00:15	Feb-09-19 00:35	Feb-09-19 00:55
	Units/RL:	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<14.9 14.9	<15.0 15.0	31.4 15.0	<15.0 15.0	<15.0 15.0
Diesel Range Organics (DRO)		15.4 15.0	17.0 14.9	52.4 15.0	171 15.0	197 15.0	62.9 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<14.9 14.9	<15.0 15.0	18.7 15.0	39.6 15.0	<15.0 15.0
Total TPH		15.4 15.0	17.0 14.9	52.4 15.0	221 15.0	237 15.0	62.9 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

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Version: 1.9%

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 614003

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 18-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	614003-007	614003-008	614003-009	614003-010	614003-011	614003-012
	<i>Field Id:</i>	PH12	SW08	SW09	SW10	SW11	FS14
	<i>Depth:</i>	4.5- ft	0-2.5 ft	0-3 ft	0-2.5 ft	0-2 ft	1-2.5 ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-05-19 11:45	Feb-05-19 14:00	Feb-05-19 14:10	Feb-06-19 14:40	Feb-06-19 14:45	Feb-06-19 14:30
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00	Feb-08-19 15:00
	<i>Analyzed:</i>	Feb-11-19 13:32	Feb-11-19 13:54	Feb-11-19 18:11	Feb-12-19 10:35	Feb-12-19 10:56	Feb-12-19 09:53
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00200 0.00200	<0.00200 0.00200	0.0653 0.0199	0.152 0.0998	0.467 0.101	0.243 0.0400
Toluene		<0.00200 0.00200	<0.00200 0.00200	0.656 0.0199	5.92 0.0998	14.8 0.101	5.70 0.0400
Ethylbenzene		<0.00200 0.00200	<0.00200 0.00200	0.615 0.0199	5.28 0.0998	10.3 0.101	3.68 0.0400
m,p-Xylenes		<0.00400 0.00400	<0.00401 0.00401	2.85 0.0398	20.3 0.200	36.9 0.201	13.6 0.0800
o-Xylene		<0.00200 0.00200	<0.00200 0.00200	1.06 0.0199	8.42 0.0998	15.8 0.101	6.40 0.0400
Total Xylenes		<0.00200 0.00200	<0.00200 0.00200	3.91 0.0199	28.7 0.0998	52.7 0.101	20.0 0.0400
Total BTEX		<0.00200 0.00200	<0.00200 0.00200	5.25 0.0199	40.1 0.0998	78.3 0.101	29.6 0.0400
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00	Feb-08-19 13:00
	<i>Analyzed:</i>	Feb-08-19 20:00	Feb-08-19 20:07	Feb-08-19 20:13	Feb-08-19 20:19	Feb-08-19 20:25	Feb-08-19 20:31
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		877 5.00	818 5.00	5650 50.0	5120 49.7	5140 49.8	15600 100
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00
	<i>Analyzed:</i>	Feb-09-19 01:16	Feb-09-19 01:36	Feb-09-19 01:56	Feb-09-19 02:57	Feb-09-19 03:17	Feb-09-19 03:37
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	822 15.0	2350 74.8	2170 74.7	1420 15.0
Diesel Range Organics (DRO)		<15.0 15.0	60.2 15.0	3480 15.0	8190 74.8	6970 74.7	4280 15.0
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<15.0 15.0	449 15.0	1100 74.8	994 74.7	487 15.0
Total TPH		<15.0 15.0	60.2 15.0	4750 15.0	11600 74.8	10100 74.7	6190 15.0

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Version: 1.9%

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 614003

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 18-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	614003-013					
	Field Id:	FS15					
	Depth:	1-2.5 ft					
	Matrix:	SOIL					
	Sampled:	Feb-06-19 14:35					
BTEX by EPA 8021B	Extracted:	Feb-08-19 15:00					
	Analyzed:	Feb-12-19 11:18					
	Units/RL:	mg/kg RL					
	Benzene	0.140 0.101					
	Toluene	1.89 0.101					
	Ethylbenzene	5.11 0.101					
	m,p-Xylenes	5.02 0.202					
	o-Xylene	2.66 0.101					
	Total Xylenes	7.68 0.101					
	Total BTEX	14.8 0.101					
Inorganic Anions by EPA 300	Extracted:	Feb-08-19 14:00					
	Analyzed:	Feb-08-19 21:30					
	Units/RL:	mg/kg RL					
	Chloride	9730 50.0					
TPH by SW8015 Mod	Extracted:	Feb-08-19 16:00					
	Analyzed:	Feb-09-19 03:58					
	Units/RL:	mg/kg RL					
	Gasoline Range Hydrocarbons (GRO)	403 15.0					
	Diesel Range Organics (DRO)	1550 15.0					
	Motor Oil Range Hydrocarbons (MRO)	214 15.0					
	Total TPH	2170 15.0					

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Version: 1.0%

Jessica Kramer
Project Assistant



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS10**
Lab Sample Id: 614003-001

Matrix: Soil
Date Collected: 02.05.19 11.00

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	362	4.95	mg/kg	02.08.19 18.56		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.08.19 23.14	U	1
Diesel Range Organics (DRO)	C10C28DRO	15.4	15.0	mg/kg	02.08.19 23.14		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.08.19 23.14	U	1
Total TPH	PHC635	15.4	15.0	mg/kg	02.08.19 23.14		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	02.08.19 23.14	
o-Terphenyl	84-15-1	109	%	70-135	02.08.19 23.14	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS10**
 Lab Sample Id: 614003-001

Matrix: Soil
 Date Collected: 02.05.19 11.00

Date Received: 02.08.19 12.45
 Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.11.19 11.45	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.11.19 11.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.11.19 11.45		
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.11.19 11.45		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS11**
Lab Sample Id: 614003-002

Matrix: Soil
Date Collected: 02.05.19 11.15

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1390	24.8	mg/kg	02.08.19 19.02		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.08.19 23.34	U	1
Diesel Range Organics (DRO)	C10C28DRO	17.0	14.9	mg/kg	02.08.19 23.34		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	02.08.19 23.34	U	1
Total TPH	PHC635	17.0	14.9	mg/kg	02.08.19 23.34		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	106	%	70-135	02.08.19 23.34	
o-Terphenyl	84-15-1	107	%	70-135	02.08.19 23.34	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS11**
 Lab Sample Id: 614003-002

Matrix: Soil
 Date Collected: 02.05.19 11.15

Date Received: 02.08.19 12.45
 Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.19 12.06	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 12.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	89	%	70-130	02.11.19 12.06		
4-Bromofluorobenzene	460-00-4	94	%	70-130	02.11.19 12.06		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS12**
Lab Sample Id: 614003-003

Matrix: Soil
Date Collected: 02.05.19 11.20

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	4640	24.8	mg/kg	02.08.19 19.27		5

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.08.19 23.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	52.4	15.0	mg/kg	02.08.19 23.55		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.08.19 23.55	U	1
Total TPH	PHC635	52.4	15.0	mg/kg	02.08.19 23.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	103	%	70-135	02.08.19 23.55	
o-Terphenyl	84-15-1	104	%	70-135	02.08.19 23.55	



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS12**
Lab Sample Id: 614003-003

Matrix: Soil
Date Collected: 02.05.19 11.20

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 12.28	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 12.28	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 12.28	U	1
m,p-Xylenes	179601-23-1	0.00517	0.00400	mg/kg	02.11.19 12.28		1
o-Xylene	95-47-6	0.00288	0.00200	mg/kg	02.11.19 12.28		1
Total Xylenes	1330-20-7	0.00805	0.00200	mg/kg	02.11.19 12.28		1
Total BTEX		0.00805	0.00200	mg/kg	02.11.19 12.28		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	87	%	70-130	02.11.19 12.28		
1,4-Difluorobenzene	540-36-3	103	%	70-130	02.11.19 12.28		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS13**
Lab Sample Id: 614003-004

Matrix: Soil
Date Collected: 02.05.19 11.30

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	35.2	5.00	mg/kg	02.08.19 19.08		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	31.4	15.0	mg/kg	02.09.19 00.15		1
Diesel Range Organics (DRO)	C10C28DRO	171	15.0	mg/kg	02.09.19 00.15		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	18.7	15.0	mg/kg	02.09.19 00.15		1
Total TPH	PHC635	221	15.0	mg/kg	02.09.19 00.15		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	108	%	70-135	02.09.19 00.15	
o-Terphenyl	84-15-1	108	%	70-135	02.09.19 00.15	



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS13**
Lab Sample Id: 614003-004

Matrix: Soil
Date Collected: 02.05.19 11.30

Date Received: 02.08.19 12.45
Sample Depth: 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.108	0.100	mg/kg	02.12.19 10.14		50
Toluene	108-88-3	0.475	0.100	mg/kg	02.12.19 10.14		50
Ethylbenzene	100-41-4	5.67	0.100	mg/kg	02.12.19 10.14		50
m,p-Xylenes	179601-23-1	1.11	0.200	mg/kg	02.12.19 10.14		50
o-Xylene	95-47-6	0.253	0.100	mg/kg	02.12.19 10.14		50
Total Xylenes	1330-20-7	1.36	0.100	mg/kg	02.12.19 10.14		50
Total BTEX		7.62	0.100	mg/kg	02.12.19 10.14		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	74	%	70-130	02.12.19 10.14		
4-Bromofluorobenzene	460-00-4	136	%	70-130	02.12.19 10.14	**	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW07** Matrix: Soil Date Received: 02.08.19 12.45
 Lab Sample Id: 614003-005 Date Collected: 02.05.19 13.20 Sample Depth: 0 - 4 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.08.19 13.00 Basis: Wet Weight
 Seq Number: 3078639

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	771	5.00	mg/kg	02.08.19 19.33		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.08.19 16.00 Basis: Wet Weight
 Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 00.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	197	15.0	mg/kg	02.09.19 00.35		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	39.6	15.0	mg/kg	02.09.19 00.35		1
Total TPH	PHC635	237	15.0	mg/kg	02.09.19 00.35		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	111	%	70-135	02.09.19 00.35	
o-Terphenyl	84-15-1	114	%	70-135	02.09.19 00.35	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW07**
 Lab Sample Id: 614003-005

Matrix: Soil
 Date Collected: 02.05.19 13.20

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 4 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 12.49	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 12.49	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 12.49	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.11.19 12.49	U	1
o-Xylene	95-47-6	0.00428	0.00200	mg/kg	02.11.19 12.49		1
Total Xylenes	1330-20-7	0.00428	0.00200	mg/kg	02.11.19 12.49		1
Total BTEX		0.00428	0.00200	mg/kg	02.11.19 12.49		1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	103	%	70-130	02.11.19 12.49		
1,4-Difluorobenzene	540-36-3	97	%	70-130	02.11.19 12.49		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS04A**
Lab Sample Id: 614003-006

Matrix: Soil
Date Collected: 02.05.19 13.30

Date Received: 02.08.19 12.45
Sample Depth: 4.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.9	5.00	mg/kg	02.08.19 19.54		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 00.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	62.9	15.0	mg/kg	02.09.19 00.55		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.09.19 00.55	U	1
Total TPH	PHC635	62.9	15.0	mg/kg	02.09.19 00.55		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	95	%	70-135	02.09.19 00.55	
o-Terphenyl	84-15-1	97	%	70-135	02.09.19 00.55	



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS04A**
Lab Sample Id: 614003-006

Matrix: Soil
Date Collected: 02.05.19 13.30

Date Received: 02.08.19 12.45
Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.19 13.11	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.19 13.11	U	1
Surrogate	Cas Number	% Recovery		Units	Limits	Analysis Date	Flag
4-Bromofluorobenzene	460-00-4	85		%	70-130	02.11.19 13.11	
1,4-Difluorobenzene	540-36-3	89		%	70-130	02.11.19 13.11	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH12**
 Lab Sample Id: 614003-007

Matrix: Soil
 Date Collected: 02.05.19 11.45

Date Received: 02.08.19 12.45
 Sample Depth: 4.5 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 13.00

Basis: Wet Weight

Seq Number: 3078639

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	877	5.00	mg/kg	02.08.19 20.00		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.08.19 16.00

Basis: Wet Weight

Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 01.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.09.19 01.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.09.19 01.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.09.19 01.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.09.19 01.16	
o-Terphenyl	84-15-1	97	%	70-135	02.09.19 01.16	



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH12**
Lab Sample Id: 614003-007

Matrix: Soil
Date Collected: 02.05.19 11.45

Date Received: 02.08.19 12.45
Sample Depth: 4.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.11.19 13.32	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 13.32	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	100	%	70-130	02.11.19 13.32		
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.11.19 13.32		



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW08**
 Lab Sample Id: 614003-008

Matrix: Soil
 Date Collected: 02.05.19 14.00

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 13.00

Basis: Wet Weight

Seq Number: 3078639

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	818	5.00	mg/kg	02.08.19 20.07		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.08.19 16.00

Basis: Wet Weight

Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 01.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	60.2	15.0	mg/kg	02.09.19 01.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.09.19 01.36	U	1
Total TPH	PHC635	60.2	15.0	mg/kg	02.09.19 01.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.09.19 01.36	
o-Terphenyl	84-15-1	99	%	70-135	02.09.19 01.36	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW08**
 Lab Sample Id: 614003-008

Matrix: Soil
 Date Collected: 02.05.19 14.00

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.19 13.54	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 13.54	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	81	%	70-130	02.11.19 13.54		
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.11.19 13.54		



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW09** Matrix: Soil Date Received: 02.08.19 12.45
 Lab Sample Id: 614003-009 Date Collected: 02.05.19 14.10 Sample Depth: 0 - 3 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.08.19 13.00 Basis: Wet Weight
 Seq Number: 3078639

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5650	50.0	mg/kg	02.08.19 20.13		10

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.08.19 16.00 Basis: Wet Weight
 Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	822	15.0	mg/kg	02.09.19 01.56		1
Diesel Range Organics (DRO)	C10C28DRO	3480	15.0	mg/kg	02.09.19 01.56		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	449	15.0	mg/kg	02.09.19 01.56		1
Total TPH	PHC635	4750	15.0	mg/kg	02.09.19 01.56		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	119	%	70-135	02.09.19 01.56	
o-Terphenyl	84-15-1	149	%	70-135	02.09.19 01.56	**



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW09**
 Lab Sample Id: 614003-009

Matrix: Soil
 Date Collected: 02.05.19 14.10

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 3 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.0653	0.0199	mg/kg	02.11.19 18.11		10
Toluene	108-88-3	0.656	0.0199	mg/kg	02.11.19 18.11		10
Ethylbenzene	100-41-4	0.615	0.0199	mg/kg	02.11.19 18.11		10
m,p-Xylenes	179601-23-1	2.85	0.0398	mg/kg	02.11.19 18.11		10
o-Xylene	95-47-6	1.06	0.0199	mg/kg	02.11.19 18.11		10
Total Xylenes	1330-20-7	3.91	0.0199	mg/kg	02.11.19 18.11		10
Total BTEX		5.25	0.0199	mg/kg	02.11.19 18.11		10
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	143	%	70-130	02.11.19 18.11	**	
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.11.19 18.11		



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW10**
 Lab Sample Id: 614003-010

Matrix: Soil
 Date Collected: 02.06.19 14.40

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5120	49.7	mg/kg	02.08.19 20.19		10

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2350	74.8	mg/kg	02.09.19 02.57		5
Diesel Range Organics (DRO)	C10C28DRO	8190	74.8	mg/kg	02.09.19 02.57		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	1100	74.8	mg/kg	02.09.19 02.57		5
Total TPH	PHC635	11600	74.8	mg/kg	02.09.19 02.57		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	02.09.19 02.57	
o-Terphenyl	84-15-1	206	%	70-135	02.09.19 02.57	**



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW10**
Lab Sample Id: 614003-010

Matrix: Soil
Date Collected: 02.06.19 14.40

Date Received: 02.08.19 12.45
Sample Depth: 0 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078719

Date Prep: 02.08.19 15.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.152	0.0998	mg/kg	02.12.19 10.35		50
Toluene	108-88-3	5.92	0.0998	mg/kg	02.12.19 10.35		50
Ethylbenzene	100-41-4	5.28	0.0998	mg/kg	02.12.19 10.35		50
m,p-Xylenes	179601-23-1	20.3	0.200	mg/kg	02.12.19 10.35		50
o-Xylene	95-47-6	8.42	0.0998	mg/kg	02.12.19 10.35		50
Total Xylenes	1330-20-7	28.7	0.0998	mg/kg	02.12.19 10.35		50
Total BTEX		40.1	0.0998	mg/kg	02.12.19 10.35		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	80	%	70-130	02.12.19 10.35		
4-Bromofluorobenzene	460-00-4	117	%	70-130	02.12.19 10.35		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW11**
Lab Sample Id: 614003-011

Matrix: Soil
Date Collected: 02.06.19 14.45

Date Received: 02.08.19 12.45
Sample Depth: 0 - 2 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	5140	49.8	mg/kg	02.08.19 20.25		10

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	2170	74.7	mg/kg	02.09.19 03.17		5
Diesel Range Organics (DRO)	C10C28DRO	6970	74.7	mg/kg	02.09.19 03.17		5
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	994	74.7	mg/kg	02.09.19 03.17		5
Total TPH	PHC635	10100	74.7	mg/kg	02.09.19 03.17		5

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.09.19 03.17	
o-Terphenyl	84-15-1	205	%	70-135	02.09.19 03.17	**



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **SW11**
 Lab Sample Id: 614003-011

Matrix: Soil
 Date Collected: 02.06.19 14.45

Date Received: 02.08.19 12.45
 Sample Depth: 0 - 2 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.467	0.101	mg/kg	02.12.19 10.56		50
Toluene	108-88-3	14.8	0.101	mg/kg	02.12.19 10.56		50
Ethylbenzene	100-41-4	10.3	0.101	mg/kg	02.12.19 10.56		50
m,p-Xylenes	179601-23-1	36.9	0.201	mg/kg	02.12.19 10.56		50
o-Xylene	95-47-6	15.8	0.101	mg/kg	02.12.19 10.56		50
Total Xylenes	1330-20-7	52.7	0.101	mg/kg	02.12.19 10.56		50
Total BTEX		78.3	0.101	mg/kg	02.12.19 10.56		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	107	%	70-130	02.12.19 10.56		
4-Bromofluorobenzene	460-00-4	231	%	70-130	02.12.19 10.56	**	



Certificate of Analytical Results 614003

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS14**
 Lab Sample Id: 614003-012

Matrix: Soil
 Date Collected: 02.06.19 14.30

Date Received: 02.08.19 12.45
 Sample Depth: 1 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078639

Date Prep: 02.08.19 13.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	15600	100	mg/kg	02.08.19 20.31		20

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	1420	15.0	mg/kg	02.09.19 03.37		1
Diesel Range Organics (DRO)	C10C28DRO	4280	15.0	mg/kg	02.09.19 03.37		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	487	15.0	mg/kg	02.09.19 03.37		1
Total TPH	PHC635	6190	15.0	mg/kg	02.09.19 03.37		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	122	%	70-135	02.09.19 03.37	
o-Terphenyl	84-15-1	180	%	70-135	02.09.19 03.37	**



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS14**
Lab Sample Id: 614003-012

Matrix: Soil
Date Collected: 02.06.19 14.30

Date Received: 02.08.19 12.45
Sample Depth: 1 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.243	0.0400	mg/kg	02.12.19 09.53		20
Toluene	108-88-3	5.70	0.0400	mg/kg	02.12.19 09.53		20
Ethylbenzene	100-41-4	3.68	0.0400	mg/kg	02.12.19 09.53		20
m,p-Xylenes	179601-23-1	13.6	0.0800	mg/kg	02.12.19 09.53		20
o-Xylene	95-47-6	6.40	0.0400	mg/kg	02.12.19 09.53		20
Total Xylenes	1330-20-7	20.0	0.0400	mg/kg	02.12.19 09.53		20
Total BTEX		29.6	0.0400	mg/kg	02.12.19 09.53		20
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	79	%	70-130	02.12.19 09.53		
4-Bromofluorobenzene	460-00-4	125	%	70-130	02.12.19 09.53		



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS15**
Lab Sample Id: 614003-013

Matrix: Soil
Date Collected: 02.06.19 14.35

Date Received: 02.08.19 12.45
Sample Depth: 1 - 2.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078643

Date Prep: 02.08.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	9730	50.0	mg/kg	02.08.19 21.30		10

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	403	15.0	mg/kg	02.09.19 03.58		1
Diesel Range Organics (DRO)	C10C28DRO	1550	15.0	mg/kg	02.09.19 03.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	214	15.0	mg/kg	02.09.19 03.58		1
Total TPH	PHC635	2170	15.0	mg/kg	02.09.19 03.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	125	%	70-135	02.09.19 03.58	
o-Terphenyl	84-15-1	129	%	70-135	02.09.19 03.58	



Certificate of Analytical Results 614003



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **FS15**
Lab Sample Id: 614003-013

Matrix: Soil
Date Collected: 02.06.19 14.35

Date Received: 02.08.19 12.45
Sample Depth: 1 - 2.5 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 15.00

Basis: Wet Weight

Seq Number: 3078719

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	0.140	0.101	mg/kg	02.12.19 11.18		50
Toluene	108-88-3	1.89	0.101	mg/kg	02.12.19 11.18		50
Ethylbenzene	100-41-4	5.11	0.101	mg/kg	02.12.19 11.18		50
m,p-Xylenes	179601-23-1	5.02	0.202	mg/kg	02.12.19 11.18		50
o-Xylene	95-47-6	2.66	0.101	mg/kg	02.12.19 11.18		50
Total Xylenes	1330-20-7	7.68	0.101	mg/kg	02.12.19 11.18		50
Total BTEX		14.8	0.101	mg/kg	02.12.19 11.18		50
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	71	%	70-130	02.12.19 11.18		
4-Bromofluorobenzene	460-00-4	116	%	70-130	02.12.19 11.18		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

MB Sample Id: 7671458-1-BLK

Matrix: Solid

LCS Sample Id: 7671458-1-BKS

Prep Method: E300P

Date Prep: 02.08.19

LCSD Sample Id: 7671458-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	230	92	233	93	90-110	1	20	mg/kg	02.08.19 17:26	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

MB Sample Id: 7671460-1-BLK

Matrix: Solid

LCS Sample Id: 7671460-1-BKS

Prep Method: E300P

Date Prep: 02.08.19

LCSD Sample Id: 7671460-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	233	93	254	102	90-110	9	20	mg/kg	02.08.19 20:59	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

Parent Sample Id: 614001-001

Matrix: Soil

MS Sample Id: 614001-001 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614001-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	486	252	716	91	714	90	90-110	0	20	mg/kg	02.08.19 17:45	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078639

Parent Sample Id: 614003-004

Matrix: Soil

MS Sample Id: 614003-004 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614003-004 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	35.2	250	273	95	291	102	90-110	6	20	mg/kg	02.08.19 19:14	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

Parent Sample Id: 614004-001

Matrix: Soil

MS Sample Id: 614004-001 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614004-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	281	112	264	106	90-110	6	20	mg/kg	02.08.19 21:18	X

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

Parent Sample Id: 614004-010

Matrix: Soil

MS Sample Id: 614004-010 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614004-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	155	250	409	102	403	99	90-110	1	20	mg/kg	02.08.19 22:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

MB Sample Id: 7671417-1-BLK

Matrix: Solid

LCS Sample Id: 7671417-1-BKS

Prep Method: TX1005P

Date Prep: 02.08.19

LCSD Sample Id: 7671417-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	936	94	891	89	70-135	5	20	mg/kg	02.08.19 21:33	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	966	97	70-135	10	20	mg/kg	02.08.19 21:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		129		130		70-135	%	02.08.19 21:33
o-Terphenyl	100		122		123		70-135	%	02.08.19 21:33

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

Parent Sample Id: 614002-001

Matrix: Soil

MS Sample Id: 614002-001 S

Prep Method: TX1005P

Date Prep: 02.08.19

MSD Sample Id: 614002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	13.9	997	913	90	817	80	70-135	11	20	mg/kg	02.08.19 22:34	
Diesel Range Organics (DRO)	<8.10	997	1010	101	889	89	70-135	13	20	mg/kg	02.08.19 22:34	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	123		123		70-135	%	02.08.19 22:34
o-Terphenyl	126		117		70-135	%	02.08.19 22:34

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078719

MB Sample Id: 7671479-1-BLK

Matrix: Solid

LCS Sample Id: 7671479-1-BKS

Prep Method: SW5030B

Date Prep: 02.08.19

LCSD Sample Id: 7671479-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.119	119	0.117	116	70-130	2	35	mg/kg	02.11.19 09:17	
Toluene	<0.00200	0.0998	0.102	102	0.0998	99	70-130	2	35	mg/kg	02.11.19 09:17	
Ethylbenzene	<0.00200	0.0998	0.124	124	0.123	122	70-130	1	35	mg/kg	02.11.19 09:17	
m,p-Xylenes	<0.00399	0.200	0.244	122	0.243	121	70-130	0	35	mg/kg	02.11.19 09:17	
o-Xylene	<0.00200	0.0998	0.116	116	0.115	114	70-130	1	35	mg/kg	02.11.19 09:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		116		126		70-130	%	02.11.19 09:17
4-Bromofluorobenzene	84		96		87		70-130	%	02.11.19 09:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078719

Parent Sample Id: 614002-001

Matrix: Soil

MS Sample Id: 614002-001 S

Prep Method: SW5030B

Date Prep: 02.08.19

MSD Sample Id: 614002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.0970	97	0.0868	87	70-130	11	35	mg/kg	02.11.19 09:59	
Toluene	<0.00200	0.100	0.0853	85	0.0778	78	70-130	9	35	mg/kg	02.11.19 09:59	
Ethylbenzene	<0.00200	0.100	0.0878	88	0.0803	81	70-130	9	35	mg/kg	02.11.19 09:59	
m,p-Xylenes	<0.00401	0.200	0.165	83	0.147	74	70-130	12	35	mg/kg	02.11.19 09:59	
o-Xylene	<0.00200	0.100	0.0789	79	0.0731	74	70-130	8	35	mg/kg	02.11.19 09:59	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	103		107		70-130	%	02.11.19 09:59
4-Bromofluorobenzene	89		90		70-130	%	02.11.19 09:59

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * [(C - E) / (C + E)]$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

614003

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 1 of 2

Project Manager: Adrian Baker
 Company Name: LT Environmental, Inc., Permian office
 Address: 3300 North A Street
 City, State ZIP: Midland, TX 79705
 Phone: 432.704.5178 (575) 300-6754 Email: abaker@ltenv.com, abaker@ltenv.com

Work Order Comments

Program: ☐UST/ST ☐RP ☐rowfields ☐C ☐perfund ☐

State of Project:

Reporting Level: ☐I ☐II ☐III ☐ST/UST ☐RP ☐IV ☐

Deliverables: ☐EDD ☐Adapt ☐Other:

Project Name: PLV 420 Battery
 Project Number: 012918193
 P.O. Number: 2RP5102
 Sampler's Name: Anne Byers

ANALYSIS REQUEST

Work Order Notes

Turn Around
 Routine ☐
 Rush: same day
 Due Date:

Temp Blank: Yes ☒ No ☐ Wet Ice: Yes ☐ No ☒
 Temperature (°C): 3.0 B.S. Thermometer ID: RB
 Received Intact: Yes ☒ No ☐
 Cooler Custody Seals: Yes ☐ No ☒ Correction Factor: -0.1
 Sample Custody Seals: Yes ☐ No ☒ Total Containers:

Number of Containers

TPH (EPA 8015)
 BTEX (EPA 8021)
 Chloride (EPA 300.0)

TAT starts the day received by the lab, if received by 4:30pm

Sample Comments

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Number of Containers	TPH (EPA 8015)	BTEX (EPA 8021)	Chloride (EPA 300.0)	Other
FS10	S	2/5	11:00	2.5'	1				
FS11	S		11:15	2.5'	1				
FS12	S		11:20	2.5'	1				
FS13	S		11:30	2.5'	1				
SW07	S		13:30	0-4'	1				
FS04A	S		13:30	4.5'	1				
FS04 PH12	S		11:45	4.5'	1				
SW08	S		14:00	0-2.5'	1				
SW09	S		14:10	0-3'	1				
SW10	S	2/6	14:40	0-2.5'	1				

Total 200.7 / 6010 200.8 / 6020:

Circle Method(s) and Metal(s) to be analyzed

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 Ti Sn U V Zn
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature) Received by: (Signature) Date/Time Relinquished by: (Signature) Received by: (Signature) Date/Time

1 Anne Byers 2/5/19 10:35 2 Kyle Littrell 2/8/19 12:45

3 4 5 6

Revised Date 05/14/18 Rev. 2018.1



Chain of Custody

Work Order No.:

614003

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0230 San Antonio, TX (210) 509-3334
Midland TX (432-704-5440) El Paso, TX (915) 885-3443 Lubbock, TX (806) 794-1296
(575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813)

www.xenco.com Page 2 of 2

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Litchell
Company Name:	LT Environmental, Inc., Permian office	Company Name:	X7B Energy
Address:	3300 North A Street	Address:	3104 E Greene St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Carlsbad NM 88220
Phone:	432.704.5178 x545 and 6754	Email:	abaker@ltenv.com & abyles@ltenv.com

Work Order Comments				
Program: UST/PST	☐ RP	☐ Rowfields	☐ C	☐ Depthund
State of Project:				
Reporting Level II	☐ Level III	☐ ST/UST	☐ RP	☐ Level IV
Deliverables: EDD	☐	ADAPT	☐	Other:

Project Name:	VL0420 Battery	Turn Around	ANALYSIS REQUEST							Work Order Notes
Project Number:	019418193	Routine ☐								
P.O. Number:	2RF5162	Rush: <i>Saturday</i>								
Sampler's Name:	Anna Byers	Due Date:								

SAMPLE RECEIPT				Temp Blank:	Yes	No	Wet Ice:	Yes	No
Temperature (°C):	3.4/3.5 Thermometer ID								
Received intact:	(Yes) No								
Cooler Custody Seals:	Yes	No	N/A	Correction Factor:	-0.1				
Sample Custody Seals:	Yes	No	N/A	Total Containers:					

Number of Containers

EPA 8015)

EPA 8021)

e (EPA 300.0)

TAT starts the day received by the lab, if received by 4:30pm

[illegible]

Total 200.7 / 6010 200.8 / 6020:
Circle Method(s) and Metal(s) to be

	8RCRA	13PMI	Texas 11	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo
TCLP/SPLP 6010:	8RCRA	Sb	As	Ba	Be	Cd	Cr	Co	Cu	Pb	Mn	Mo	Ni	Se	Ag	Tl	U		

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xencro, its affiliates and subcontractors. It assigns standard terms and conditions of service. Xencro 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 Xencro. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xencro, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Carrie Byers</i>	<i>[Signature]</i>	2/14/19 10:35	2 <i>[Signature]</i>	<i>[Signature]</i>	2/18/19 PMS
3	<i>[Signature]</i>		4		
5			6		



Client: LT Environmental, Inc.

Date/ Time Received: 02/08/2019 12:45:00 PM

Work Order #: 614003

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 02/08/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/11/2019

Analytical Report 614004

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

12-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):
Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):
Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)
Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)
Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)
Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)
Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)
Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)
Xenco-Atlanta (LELAP Lab ID #04176)
Xenco-Tampa: Florida (E87429)
Xenco-Lakeland: Florida (E84098)



12-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **614004**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 614004. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 614004 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 614004****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
PH06	S	02-05-19 14:35	ft	614004-001
PH06A	S	02-05-19 14:45	1 ft	614004-002
PH07	S	02-05-19 14:50	ft	614004-003
PH07A	S	02-05-19 15:00	1 ft	614004-004
PH08	S	02-05-19 14:50	ft	614004-005
PH08A	S	02-05-19 14:52	1 ft	614004-006
PH09	S	02-05-19 15:45	ft	614004-007
PH09A	S	02-05-19 15:50	1 ft	614004-008
PH10	S	02-05-19 16:00	ft	614004-009
PH10A	S	02-05-19 16:05	1 ft	614004-010



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420 Battery

Project ID: 012918193
Work Order Number(s): 614004

Report Date: 12-FEB-19
Date Received: 02/08/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3078643 Inorganic Anions by EPA 300

Lab Sample ID 614004-010 was randomly selected for Matrix Spike/Matrix Spike Duplicate (MS/MSD).

Chloride recovered above QC limits in the Matrix Spike. Outlier/s are due to possible matrix interference.

Samples in the analytical batch are: 614004-001, -002, -003, -004, -005, -006, -007, -008, -009, -010.

The Laboratory Control Sample for Chloride is within laboratory Control Limits, therefore the data was accepted.

Batch: LBA-3078779 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 614004

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 12-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	614004-001	614004-002	614004-003	614004-004	614004-005	614004-006
	<i>Field Id:</i>	PH06	PH06A	PH07	PH07A	PH08	PH08A
	<i>Depth:</i>		1- ft		1- ft		1- ft
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
	<i>Sampled:</i>	Feb-05-19 14:35	Feb-05-19 14:45	Feb-05-19 14:50	Feb-05-19 15:00	Feb-05-19 14:50	Feb-05-19 14:52
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00
	<i>Analyzed:</i>	Feb-11-19 22:26	Feb-11-19 22:47	Feb-11-19 23:08	Feb-11-19 23:30	Feb-11-19 23:51	Feb-12-19 00:13
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Benzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Toluene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Ethylbenzene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
m,p-Xylenes		<0.00398 0.00398	<0.00400 0.00400	<0.00402 0.00402	<0.00398 0.00398	<0.00401 0.00401	<0.00398 0.00398
o-Xylene		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total Xylenes		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Total BTEX		<0.00199 0.00199	<0.00200 0.00200	<0.00201 0.00201	<0.00199 0.00199	<0.00200 0.00200	<0.00199 0.00199
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00
	<i>Analyzed:</i>	Feb-08-19 21:12	Feb-08-19 21:36	Feb-08-19 21:42	Feb-08-19 21:49	Feb-08-19 22:10	Feb-08-19 22:16
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Chloride		<5.00 5.00	<5.00 5.00	138 5.00	188 5.03	6.72 4.97	<5.00 5.00
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00	Feb-08-19 16:00
	<i>Analyzed:</i>	Feb-09-19 04:18	Feb-09-19 04:38	Feb-09-19 04:58	Feb-09-19 05:18	Feb-09-19 05:39	Feb-09-19 05:59
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9	<14.9 14.9	<15.0 15.0
Diesel Range Organics (DRO)		39.8 15.0	<15.0 15.0	1070 15.0	243 14.9	<14.9 14.9	<15.0 15.0
Motor Oil Range Hydrocarbons (MRO)		15.9 15.0	<15.0 15.0	417 15.0	105 14.9	<14.9 14.9	<15.0 15.0
Total TPH		55.7 15.0	<15.0 15.0	1490 15.0	348 14.9	<14.9 14.9	<15.0 15.0

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analysis Summary 614004

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Fri Feb-08-19 12:45 pm
Report Date: 12-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	614004-007	614004-008	614004-009	614004-010		
	<i>Field Id:</i>	PH09	PH09A	PH10	PH10A		
	<i>Depth:</i>		1- ft		1- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Feb-05-19 15:45	Feb-05-19 15:50	Feb-05-19 16:00	Feb-05-19 16:05		
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00	Feb-08-19 17:00		
	<i>Analyzed:</i>	Feb-12-19 00:34	Feb-12-19 00:56	Feb-12-19 01:17	Feb-12-19 01:39		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Toluene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Ethylbenzene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
m,p-Xylenes		<0.00403 0.00403	<0.00399 0.00399	<0.00400 0.00400	<0.00400 0.00400		
o-Xylene		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Total Xylenes		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Total BTEX		<0.00202 0.00202	<0.00200 0.00200	<0.00200 0.00200	<0.00200 0.00200		
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00	Feb-08-19 14:00		
	<i>Analyzed:</i>	Feb-08-19 22:23	Feb-08-19 22:29	Feb-08-19 22:35	Feb-08-19 22:41		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		206 4.96	1100 4.98	179 5.03	155 4.99		
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-09-19 14:00	Feb-09-19 14:00	Feb-09-19 14:00	Feb-09-19 14:00		
	<i>Analyzed:</i>	Feb-10-19 02:42	Feb-10-19 03:42	Feb-10-19 04:02	Feb-10-19 04:23		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<14.9 14.9		
Diesel Range Organics (DRO)		41.1 15.0	<15.0 15.0	79.9 15.0	101 14.9		
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<15.0 15.0	16.6 15.0	20.0 14.9		
Total TPH		41.1 15.0	<15.0 15.0	96.5 15.0	121 14.9		

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Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH06**
Lab Sample Id: 614004-001

Matrix: Soil
Date Collected: 02.05.19 14.35

Date Received: 02.08.19 12.45

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 14.00

Basis: Wet Weight

Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.08.19 21.12	U	1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.08.19 16.00

Basis: Wet Weight

Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 04.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	39.8	15.0	mg/kg	02.09.19 04.18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	15.9	15.0	mg/kg	02.09.19 04.18		1
Total TPH	PHC635	55.7	15.0	mg/kg	02.09.19 04.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	02.09.19 04.18	
o-Terphenyl	84-15-1	115	%	70-135	02.09.19 04.18	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH06**
Lab Sample Id: 614004-001

Matrix: Soil
Date Collected: 02.05.19 14.35

Date Received: 02.08.19 12.45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.19 22.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.19 22.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	93	%	70-130	02.11.19 22.26		
4-Bromofluorobenzene	460-00-4	91	%	70-130	02.11.19 22.26		



Certificate of Analytical Results 614004

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH06A**
 Lab Sample Id: 614004-002

Matrix: Soil
 Date Collected: 02.05.19 14.45

Date Received: 02.08.19 12.45
 Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078643

Date Prep: 02.08.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.08.19 21.36	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 04.38	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.09.19 04.38	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.09.19 04.38	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.09.19 04.38	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	99	%	70-135	02.09.19 04.38	
o-Terphenyl	84-15-1	98	%	70-135	02.09.19 04.38	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH06A**
Lab Sample Id: 614004-002

Matrix: Soil
Date Collected: 02.05.19 14.45

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078779

Date Prep: 02.08.19 17.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.11.19 22.47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 22.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	91	%	70-130	02.11.19 22.47		
4-Bromofluorobenzene	460-00-4	88	%	70-130	02.11.19 22.47		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH07**
Lab Sample Id: 614004-003

Matrix: Soil
Date Collected: 02.05.19 14.50

Date Received: 02.08.19 12.45

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 14.00

Basis: Wet Weight

Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	138	5.00	mg/kg	02.08.19 21.42		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.08.19 16.00

Basis: Wet Weight

Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 04.58	U	1
Diesel Range Organics (DRO)	C10C28DRO	1070	15.0	mg/kg	02.09.19 04.58		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	417	15.0	mg/kg	02.09.19 04.58		1
Total TPH	PHC635	1490	15.0	mg/kg	02.09.19 04.58		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	104	%	70-135	02.09.19 04.58	
o-Terphenyl	84-15-1	119	%	70-135	02.09.19 04.58	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH07**
Lab Sample Id: 614004-003

Matrix: Soil
Date Collected: 02.05.19 14.50

Date Received: 02.08.19 12.45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.11.19 23.08	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.11.19 23.08	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	96	%	70-130	02.11.19 23.08		
4-Bromofluorobenzene	460-00-4	89	%	70-130	02.11.19 23.08		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH07A**
Lab Sample Id: 614004-004

Matrix: Soil
Date Collected: 02.05.19 15.00

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078643

Date Prep: 02.08.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	188	5.03	mg/kg	02.08.19 21.49		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.09.19 05.18	U	1
Diesel Range Organics (DRO)	C10C28DRO	243	14.9	mg/kg	02.09.19 05.18		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	105	14.9	mg/kg	02.09.19 05.18		1
Total TPH	PHC635	348	14.9	mg/kg	02.09.19 05.18		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	116	%	70-135	02.09.19 05.18	
o-Terphenyl	84-15-1	116	%	70-135	02.09.19 05.18	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH07A**
Lab Sample Id: 614004-004

Matrix: Soil
Date Collected: 02.05.19 15.00

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.11.19 23.30	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.11.19 23.30	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	89	%	70-130	02.11.19 23.30		
4-Bromofluorobenzene	460-00-4	90	%	70-130	02.11.19 23.30		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH08**
Lab Sample Id: 614004-005

Matrix: Soil
Date Collected: 02.05.19 14.50

Date Received: 02.08.19 12.45

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 14.00

Basis: Wet Weight

Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	6.72	4.97	mg/kg	02.08.19 22.10		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.08.19 16.00

Basis: Wet Weight

Seq Number: 3078596

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.09.19 05.39	U	1
Diesel Range Organics (DRO)	C10C28DRO	<14.9	14.9	mg/kg	02.09.19 05.39	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<14.9	14.9	mg/kg	02.09.19 05.39	U	1
Total TPH	PHC635	<14.9	14.9	mg/kg	02.09.19 05.39	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	02.09.19 05.39	
o-Terphenyl	84-15-1	91	%	70-135	02.09.19 05.39	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH08**
Lab Sample Id: 614004-005

Matrix: Soil
Date Collected: 02.05.19 14.50

Date Received: 02.08.19 12.45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.11.19 23.51	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.11.19 23.51	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.11.19 23.51		
1,4-Difluorobenzene	540-36-3	94	%	70-130	02.11.19 23.51		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH08A**
Lab Sample Id: 614004-006

Matrix: Soil
Date Collected: 02.05.19 14.52

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078643

Date Prep: 02.08.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.08.19 22.16	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078596

Date Prep: 02.08.19 16.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.09.19 05.59	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.09.19 05.59	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.09.19 05.59	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.09.19 05.59	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	98	%	70-135	02.09.19 05.59	
o-Terphenyl	84-15-1	96	%	70-135	02.09.19 05.59	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH08A**
Lab Sample Id: 614004-006

Matrix: Soil
Date Collected: 02.05.19 14.52

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078779

Date Prep: 02.08.19 17.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.12.19 00.13	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.12.19 00.13	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.12.19 00.13		
4-Bromofluorobenzene	460-00-4	87	%	70-130	02.12.19 00.13		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH09**
Lab Sample Id: 614004-007

Matrix: Soil
Date Collected: 02.05.19 15.45

Date Received: 02.08.19 12.45

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 14.00

Basis: Wet Weight

Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	206	4.96	mg/kg	02.08.19 22.23		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.09.19 14.00

Basis: Wet Weight

Seq Number: 3078602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.10.19 02.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	41.1	15.0	mg/kg	02.10.19 02.42		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.10.19 02.42	U	1
Total TPH	PHC635	41.1	15.0	mg/kg	02.10.19 02.42		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	96	%	70-135	02.10.19 02.42	
o-Terphenyl	84-15-1	95	%	70-135	02.10.19 02.42	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH09**
Lab Sample Id: 614004-007

Matrix: Soil
Date Collected: 02.05.19 15.45

Date Received: 02.08.19 12.45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.12.19 00.34	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.12.19 00.34	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	95	%	70-130	02.12.19 00.34		
4-Bromofluorobenzene	460-00-4	93	%	70-130	02.12.19 00.34		



Certificate of Analytical Results 614004

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH09A** Matrix: Soil Date Received: 02.08.19 12.45
 Lab Sample Id: 614004-008 Date Collected: 02.05.19 15.50 Sample Depth: 1 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.08.19 14.00 Basis: Wet Weight
 Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	1100	4.98	mg/kg	02.08.19 22.29		1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.09.19 14.00 Basis: Wet Weight
 Seq Number: 3078602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.10.19 03.42	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.10.19 03.42	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.10.19 03.42	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.10.19 03.42	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.10.19 03.42	
o-Terphenyl	84-15-1	92	%	70-135	02.10.19 03.42	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH09A**
Lab Sample Id: 614004-008

Matrix: Soil
Date Collected: 02.05.19 15.50

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3078779

Date Prep: 02.08.19 17.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.12.19 00.56	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.12.19 00.56	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	88	%	70-130	02.12.19 00.56		
1,4-Difluorobenzene	540-36-3	90	%	70-130	02.12.19 00.56		



Certificate of Analytical Results 614004

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH10**
 Lab Sample Id: 614004-009

Matrix: Soil
 Date Collected: 02.05.19 16.00

Date Received: 02.08.19 12.45

Analytical Method: Inorganic Anions by EPA 300

Prep Method: E300P

Tech: CHE

% Moisture:

Analyst: CHE

Date Prep: 02.08.19 14.00

Basis: Wet Weight

Seq Number: 3078643

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	179	5.03	mg/kg	02.08.19 22.35		1

Analytical Method: TPH by SW8015 Mod

Prep Method: TX1005P

Tech: ARM

% Moisture:

Analyst: ARM

Date Prep: 02.09.19 14.00

Basis: Wet Weight

Seq Number: 3078602

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.10.19 04.02	U	1
Diesel Range Organics (DRO)	C10C28DRO	79.9	15.0	mg/kg	02.10.19 04.02		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	16.6	15.0	mg/kg	02.10.19 04.02		1
Total TPH	PHC635	96.5	15.0	mg/kg	02.10.19 04.02		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	94	%	70-135	02.10.19 04.02	
o-Terphenyl	84-15-1	95	%	70-135	02.10.19 04.02	



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH10**
Lab Sample Id: 614004-009

Matrix: Soil
Date Collected: 02.05.19 16.00

Date Received: 02.08.19 12.45

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.12.19 01.17	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.12.19 01.17	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	02.12.19 01.17		
1,4-Difluorobenzene	540-36-3	89	%	70-130	02.12.19 01.17		



Certificate of Analytical Results 614004



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH10A**
Lab Sample Id: 614004-010

Matrix: Soil
Date Collected: 02.05.19 16.05

Date Received: 02.08.19 12.45
Sample Depth: 1 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3078643

Date Prep: 02.08.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	155	4.99	mg/kg	02.08.19 22.41		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3078602

Date Prep: 02.09.19 14.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<14.9	14.9	mg/kg	02.10.19 04.23	U	1
Diesel Range Organics (DRO)	C10C28DRO	101	14.9	mg/kg	02.10.19 04.23		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	20.0	14.9	mg/kg	02.10.19 04.23		1
Total TPH	PHC635	121	14.9	mg/kg	02.10.19 04.23		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.10.19 04.23	
o-Terphenyl	84-15-1	94	%	70-135	02.10.19 04.23	



Certificate of Analytical Results 614004

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **PH10A**
 Lab Sample Id: 614004-010

Matrix: Soil
 Date Collected: 02.05.19 16.05

Date Received: 02.08.19 12.45
 Sample Depth: 1 ft

Analytical Method: BTEX by EPA 8021B

Prep Method: SW5030B

Tech: SCM

% Moisture:

Analyst: SCM

Date Prep: 02.08.19 17.00

Basis: Wet Weight

Seq Number: 3078779

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
m,p-Xylenes	179601-23-1	<0.00400	0.00400	mg/kg	02.12.19 01.39	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.12.19 01.39	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	92	%	70-130	02.12.19 01.39		
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.12.19 01.39		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

MB Sample Id: 7671460-1-BLK

Matrix: Solid

LCS Sample Id: 7671460-1-BKS

Prep Method: E300P

Date Prep: 02.08.19

LCSD Sample Id: 7671460-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	233	93	254	102	90-110	9	20	mg/kg	02.08.19 20:59	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

Parent Sample Id: 614004-001

Matrix: Soil

MS Sample Id: 614004-001 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614004-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	281	112	264	106	90-110	6	20	mg/kg	02.08.19 21:18	X

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3078643

Parent Sample Id: 614004-010

Matrix: Soil

MS Sample Id: 614004-010 S

Prep Method: E300P

Date Prep: 02.08.19

MSD Sample Id: 614004-010 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	155	250	409	102	403	99	90-110	1	20	mg/kg	02.08.19 22:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

MB Sample Id: 7671417-1-BLK

Matrix: Solid

LCS Sample Id: 7671417-1-BKS

Prep Method: TX1005P

Date Prep: 02.08.19

LCSD Sample Id: 7671417-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	936	94	891	89	70-135	5	20	mg/kg	02.08.19 21:33	
Diesel Range Organics (DRO)	<8.13	1000	1070	107	966	97	70-135	10	20	mg/kg	02.08.19 21:33	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	99		129		130		70-135	%	02.08.19 21:33
o-Terphenyl	100		122		123		70-135	%	02.08.19 21:33

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078602

MB Sample Id: 7671426-1-BLK

Matrix: Solid

LCS Sample Id: 7671426-1-BKS

Prep Method: TX1005P

Date Prep: 02.09.19

LCSD Sample Id: 7671426-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	887	89	902	90	70-135	2	20	mg/kg	02.10.19 02:02	
Diesel Range Organics (DRO)	<8.13	1000	921	92	903	90	70-135	2	20	mg/kg	02.10.19 02:02	
Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane	102		121		122		70-135	%	02.10.19 02:02			
o-Terphenyl	103		117		117		70-135	%	02.10.19 02:02			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078596

Parent Sample Id: 614002-001

Matrix: Soil

MS Sample Id: 614002-001 S

Prep Method: TX1005P

Date Prep: 02.08.19

MSD Sample Id: 614002-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	13.9	997	913	90	817	80	70-135	11	20	mg/kg	02.08.19 22:34	
Diesel Range Organics (DRO)	<8.10	997	1010	101	889	89	70-135	13	20	mg/kg	02.08.19 22:34	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			123		123		70-135	%	02.08.19 22:34			
o-Terphenyl			126		117		70-135	%	02.08.19 22:34			

Analytical Method: TPH by SW8015 Mod

Seq Number: 3078602

Parent Sample Id: 614004-007

Matrix: Soil

MS Sample Id: 614004-007 S

Prep Method: TX1005P

Date Prep: 02.09.19

MSD Sample Id: 614004-007 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	8.86	999	877	87	908	90	70-135	3	20	mg/kg	02.10.19 11:48	
Diesel Range Organics (DRO)	41.1	999	939	90	952	91	70-135	1	20	mg/kg	02.10.19 11:48	
Surrogate			MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date			
1-Chlorooctane			120		121		70-135	%	02.10.19 11:48			
o-Terphenyl			114		116		70-135	%	02.10.19 11:48			

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 $\text{Log Diff.} = \text{Log}(\text{Sample Duplicate}) - \text{Log}(\text{Original Sample})$

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078779

MB Sample Id: 7671481-1-BLK

Matrix: Solid

LCS Sample Id: 7671481-1-BKS

Prep Method: SW5030B

Date Prep: 02.08.19

LCSD Sample Id: 7671481-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.0998	0.0958	96	0.127	127	70-130	28	35	mg/kg	02.11.19 20:17	
Toluene	<0.00200	0.0998	0.0831	83	0.106	106	70-130	24	35	mg/kg	02.11.19 20:17	
Ethylbenzene	<0.00200	0.0998	0.0950	95	0.121	121	70-130	24	35	mg/kg	02.11.19 20:17	
m,p-Xylenes	<0.00399	0.200	0.178	89	0.234	117	70-130	27	35	mg/kg	02.11.19 20:17	
o-Xylene	<0.00200	0.0998	0.0848	85	0.110	110	70-130	26	35	mg/kg	02.11.19 20:17	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	87		107		117		70-130	%	02.11.19 20:17
4-Bromofluorobenzene	83		88		87		70-130	%	02.11.19 20:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3078779

Parent Sample Id: 614004-001

Matrix: Soil

MS Sample Id: 614004-001 S

Prep Method: SW5030B

Date Prep: 02.08.19

MSD Sample Id: 614004-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00202	0.101	0.113	112	0.115	114	70-130	2	35	mg/kg	02.11.19 21:01	
Toluene	<0.00202	0.101	0.0872	86	0.0903	89	70-130	3	35	mg/kg	02.11.19 21:01	
Ethylbenzene	<0.00202	0.101	0.0961	95	0.0990	98	70-130	3	35	mg/kg	02.11.19 21:01	
m,p-Xylenes	<0.00403	0.202	0.186	92	0.184	92	70-130	1	35	mg/kg	02.11.19 21:01	
o-Xylene	<0.00202	0.101	0.104	103	0.109	108	70-130	5	35	mg/kg	02.11.19 21:01	

Surrogate	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	96		119		70-130	%	02.11.19 21:01
4-Bromofluorobenzene	77		90		70-130	%	02.11.19 21:01

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * [(C - E) / (C + E)]$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No: 64607

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
Midland, TX (432-704-5440) EL Paso, TX (915) 585-3443 Lubbock, TX (806) 794-1296

Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

www.xenco.com Page 1 of 1

Project Manager:		Adrian Baker	Bill to: (if different)	Kyle Littell
Company Name:		LT Environmental, Inc., Permian office	Company Name:	XTO Energy
Address:		3300 North A Street	Address:	3104 E Greene St
City, State ZIP:		Midland, TX 79705	City, State ZIP:	Casabad, NM, 88220
Phone:		432.704.5178 / 575.200.6754	Email:	abaker@ltenv.com / abaker@ltenv.com

Work Order Comments	
Program: UST/PST ☐ RP ☐ Flowfields ☐ C ☐ perfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ ST/UST ☐ RP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

Project Name:	PLU 400 Battery	Turn Around
Project Number:	012918193	Routine ☐
P.O. Number:	2RP5162	Rush: same day
Sampler's Name:	Anna Biggs	Due Date:

SAMPLE RECEIPT			
Temperature (°C):	3.0/3.5	Temp Blank:	Yes No ☒ ☐
Received Intact:	Yes No ☒ ☐	Thermometer ID	RB
Cooler Custody Seals:	Yes No ☒ ☐	Correction Factor:	-0.1
Sample Custody Seals:	Yes No ☒ ☐	Total Containers:	

ANALYSIS REQUEST							Work Order Notes
EPA 8015)							TAT starts the day received by the lab, if received by 4:30pm
EPA 8021)							
e (EPA 300.0)							

[illegible]

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 Ti Sn U V Zr
 TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U
 1631 / 245.1 / 7470 / 7

1631 / 245.1 / 7470 / 7471 : Hg

Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to Xenco, but not analyzed. These terms will be enforced unless previously negotiated.

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1 <i>Doree Byers</i>	<i>[Signature]</i>	2/7/19 10:35	2 <i>[Signature]</i>	<i>[Signature]</i>	2/8/19 12:45
3	<i>[Signature]</i>		4	<i>[Signature]</i>	
5			6		

Revised Date 051418 Rev. 2018.



Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/08/2019 12:45:00 PM

Work Order #: 614004

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	3.5
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	No
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Katie Lowe

Date: 02/08/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/11/2019

Analytical Report 615143

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

21-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)

Xenco-Lakeland: Florida (E84098)



21-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **615143**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 615143. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 615143 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

Certified and approved by numerous States and Agencies.

A Small Business and Minority Status Company that delivers SERVICE and QUALITY

Houston - Dallas - Midland - San Antonio - Phoenix - Oklahoma - Latin America

**Sample Cross Reference 615143****LT Environmental, Inc., Arvada, CO**

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH13	S	02-19-19 10:25	0.3 ft	615143-001
BH13A	S	02-19-19 10:30	3.5 ft	615143-002
BH14	S	02-19-19 10:40	0.3 ft	615143-003
BH14A	S	02-19-19 10:45	3.0 ft	615143-004



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420 Battery

Project ID: 012918193

Work Order Number(s): 615143

Report Date: 21-FEB-19

Date Received: 02/20/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3079849 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 615143

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Wed Feb-20-19 12:49 pm
Report Date: 21-FEB-19
Project Manager: Jessica Kramer

<i>Analysis Requested</i>	<i>Lab Id:</i>	615143-001	615143-002	615143-003	615143-004		
	<i>Field Id:</i>	BH13	BH13A	BH14	BH14A		
	<i>Depth:</i>	0.3- ft	3.5- ft	0.3- ft	3.0- ft		
	<i>Matrix:</i>	SOIL	SOIL	SOIL	SOIL		
	<i>Sampled:</i>	Feb-19-19 10:25	Feb-19-19 10:30	Feb-19-19 10:40	Feb-19-19 10:45		
BTEX by EPA 8021B	<i>Extracted:</i>	Feb-20-19 14:30	Feb-20-19 14:30	Feb-20-19 14:30	Feb-20-19 14:30		
	<i>Analyzed:</i>	Feb-20-19 20:06	Feb-20-19 20:26	Feb-20-19 20:45	Feb-20-19 21:04		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Benzene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
Toluene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
Ethylbenzene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
m,p-Xylenes		<0.00403 0.00403	<0.00398 0.00398	<0.00402 0.00402	<0.00398 0.00398		
o-Xylene		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
Total Xylenes		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
Total BTEX		<0.00202 0.00202	<0.00199 0.00199	<0.00201 0.00201	<0.00199 0.00199		
Inorganic Anions by EPA 300	<i>Extracted:</i>	Feb-20-19 14:00	Feb-20-19 14:00	Feb-20-19 14:00	Feb-20-19 14:00		
	<i>Analyzed:</i>	Feb-20-19 21:03	Feb-20-19 21:09	Feb-20-19 21:15	Feb-20-19 21:22		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Chloride		<4.96 4.96	<4.96 4.96	<5.00 5.00	<5.00 5.00		
TPH by SW8015 Mod	<i>Extracted:</i>	Feb-20-19 13:00	Feb-20-19 13:00	Feb-20-19 13:00	Feb-20-19 13:00		
	<i>Analyzed:</i>	Feb-20-19 22:16	Feb-20-19 22:35	Feb-20-19 22:55	Feb-20-19 23:15		
	<i>Units/RL:</i>	mg/kg RL	mg/kg RL	mg/kg RL	mg/kg RL		
Gasoline Range Hydrocarbons (GRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Diesel Range Organics (DRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Motor Oil Range Hydrocarbons (MRO)		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		
Total TPH		<15.0 15.0	<15.0 15.0	<15.0 15.0	<15.0 15.0		

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 615143

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH13** Matrix: Soil Date Received: 02.20.19 12.49
 Lab Sample Id: 615143-001 Date Collected: 02.19.19 10.25 Sample Depth: 0.3 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.20.19 14.00 Basis: Wet Weight
 Seq Number: 3079943

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	02.20.19 21.03	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.20.19 13.00 Basis: Wet Weight
 Seq Number: 3079924

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 22.16	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.20.19 22.16	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 22.16	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.20.19 22.16	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	89	%	70-135	02.20.19 22.16	
o-Terphenyl	84-15-1	82	%	70-135	02.20.19 22.16	



Certificate of Analytical Results 615143



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH13**
Lab Sample Id: 615143-001

Matrix: Soil
Date Collected: 02.19.19 10.25

Date Received: 02.20.19 12.49
Sample Depth: 0.3 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079849

Date Prep: 02.20.19 14.30

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
Toluene	108-88-3	<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
Ethylbenzene	100-41-4	<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
m,p-Xylenes	179601-23-1	<0.00403	0.00403	mg/kg	02.20.19 20.06	U	1
o-Xylene	95-47-6	<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
Total Xylenes	1330-20-7	<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
Total BTEX		<0.00202	0.00202	mg/kg	02.20.19 20.06	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	104	%	70-130	02.20.19 20.06		
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.20.19 20.06		



Certificate of Analytical Results 615143

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH13A**
 Lab Sample Id: 615143-002

Matrix: Soil
 Date Collected: 02.19.19 10.30

Date Received: 02.20.19 12.49
 Sample Depth: 3.5 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3079943

Date Prep: 02.20.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<4.96	4.96	mg/kg	02.20.19 21.09	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3079924

Date Prep: 02.20.19 13.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 22.35	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.20.19 22.35	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 22.35	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.20.19 22.35	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.20.19 22.35	
o-Terphenyl	84-15-1	89	%	70-135	02.20.19 22.35	



Certificate of Analytical Results 615143



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH13A**
Lab Sample Id: 615143-002

Matrix: Soil
Date Collected: 02.19.19 10.30

Date Received: 02.20.19 12.49
Sample Depth: 3.5 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079849

Date Prep: 02.20.19 14.30

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.20.19 20.26	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.20.19 20.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.20.19 20.26		
4-Bromofluorobenzene	460-00-4	107	%	70-130	02.20.19 20.26		



Certificate of Analytical Results 615143

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH14** Matrix: Soil Date Received: 02.20.19 12.49
 Lab Sample Id: 615143-003 Date Collected: 02.19.19 10.40 Sample Depth: 0.3 ft
 Analytical Method: Inorganic Anions by EPA 300 Prep Method: E300P
 Tech: CHE % Moisture:
 Analyst: CHE Date Prep: 02.20.19 14.00 Basis: Wet Weight
 Seq Number: 3079943

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.20.19 21.15	U	1

Analytical Method: TPH by SW8015 Mod Prep Method: TX1005P
 Tech: ARM % Moisture:
 Analyst: ARM Date Prep: 02.20.19 13.00 Basis: Wet Weight
 Seq Number: 3079924

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 22.55	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.20.19 22.55	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 22.55	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.20.19 22.55	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.20.19 22.55	
o-Terphenyl	84-15-1	84	%	70-135	02.20.19 22.55	



Certificate of Analytical Results 615143



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH14**
Lab Sample Id: 615143-003

Matrix: Soil
Date Collected: 02.19.19 10.40

Date Received: 02.20.19 12.49
Sample Depth: 0.3 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079849

Date Prep: 02.20.19 14.30

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
Toluene	108-88-3	<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
Ethylbenzene	100-41-4	<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
m,p-Xylenes	179601-23-1	<0.00402	0.00402	mg/kg	02.20.19 20.45	U	1
o-Xylene	95-47-6	<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
Total Xylenes	1330-20-7	<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
Total BTEX		<0.00201	0.00201	mg/kg	02.20.19 20.45	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	108	%	70-130	02.20.19 20.45		
4-Bromofluorobenzene	460-00-4	127	%	70-130	02.20.19 20.45		



Certificate of Analytical Results 615143

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH14A**
 Lab Sample Id: 615143-004

Matrix: Soil
 Date Collected: 02.19.19 10.45

Date Received: 02.20.19 12.49
 Sample Depth: 3.0 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3079943

Date Prep: 02.20.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	<5.00	5.00	mg/kg	02.20.19 21.22	U	1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3079924

Date Prep: 02.20.19 13.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 23.15	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.20.19 23.15	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 23.15	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.20.19 23.15	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	93	%	70-135	02.20.19 23.15	
o-Terphenyl	84-15-1	89	%	70-135	02.20.19 23.15	



Certificate of Analytical Results 615143



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH14A**
Lab Sample Id: 615143-004

Matrix: Soil
Date Collected: 02.19.19 10.45

Date Received: 02.20.19 12.49
Sample Depth: 3.0 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079849

Prep Method: SW5030B

% Moisture:

Date Prep: 02.20.19 14.30

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
Toluene	108-88-3	<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
Ethylbenzene	100-41-4	<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
m,p-Xylenes	179601-23-1	<0.00398	0.00398	mg/kg	02.20.19 21.04	U	1
o-Xylene	95-47-6	<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
Total Xylenes	1330-20-7	<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
Total BTEX		<0.00199	0.00199	mg/kg	02.20.19 21.04	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	114	%	70-130	02.20.19 21.04		
4-Bromofluorobenzene	460-00-4	110	%	70-130	02.20.19 21.04		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

MB Sample Id: 7672210-1-BLK

Matrix: Solid

LCS Sample Id: 7672210-1-BKS

Prep Method: E300P

Date Prep: 02.20.19

LCSD Sample Id: 7672210-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	233	93	250	100	90-110	7	20	mg/kg	02.20.19 18:29	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

Parent Sample Id: 614972-003

Matrix: Soil

MS Sample Id: 614972-003 S

Prep Method: E300P

Date Prep: 02.20.19

MSD Sample Id: 614972-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.72	249	263	105	265	105	90-110	1	20	mg/kg	02.20.19 20:17	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

Parent Sample Id: 615062-003

Matrix: Soil

MS Sample Id: 615062-003 S

Prep Method: E300P

Date Prep: 02.20.19

MSD Sample Id: 615062-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.850	248	254	102	269	108	90-110	6	20	mg/kg	02.20.19 18:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3079924

MB Sample Id: 7672196-1-BLK

Matrix: Solid

LCS Sample Id: 7672196-1-BKS

Prep Method: TX1005P

Date Prep: 02.20.19

LCSD Sample Id: 7672196-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	942	94	982	98	70-135	4	20	mg/kg	02.20.19 15:00	
Diesel Range Organics (DRO)	<8.13	1000	952	95	983	98	70-135	3	20	mg/kg	02.20.19 15:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		125		129		70-135	%	02.20.19 15:00
o-Terphenyl	101		121		124		70-135	%	02.20.19 15:00

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3079924

Parent Sample Id: 614849-001

Matrix: Soil

MS Sample Id: 614849-001 S

Prep Method: TX1005P

Date Prep: 02.20.19

MSD Sample Id: 614849-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	920	92	936	94	70-135	2	20	mg/kg	02.20.19 15:59	
Diesel Range Organics (DRO)	<8.13	1000	946	95	963	96	70-135	2	20	mg/kg	02.20.19 15:59	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		125		70-135	%	02.20.19 15:59
o-Terphenyl	122		117		70-135	%	02.20.19 15:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3079849

MB Sample Id: 7672187-1-BLK

Matrix: Solid

LCS Sample Id: 7672187-1-BKS

Prep Method: SW5030B

Date Prep: 02.20.19

LCSD Sample Id: 7672187-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000388	0.101	0.122	121	0.119	119	70-130	2	35	mg/kg	02.20.19 18:14	
Toluene	<0.000459	0.101	0.106	105	0.104	104	70-130	2	35	mg/kg	02.20.19 18:14	
Ethylbenzene	<0.000569	0.101	0.101	100	0.0993	100	70-130	2	35	mg/kg	02.20.19 18:14	
m,p-Xylenes	<0.00102	0.202	0.203	100	0.200	101	70-130	1	35	mg/kg	02.20.19 18:14	
o-Xylene	<0.000347	0.101	0.0991	98	0.0975	98	70-130	2	35	mg/kg	02.20.19 18:14	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		108		108		70-130	%	02.20.19 18:14
4-Bromofluorobenzene	96		96		96		70-130	%	02.20.19 18:14

Analytical Method: BTEX by EPA 8021B

Seq Number: 3079849

Parent Sample Id: 614638-014

Matrix: Soil

MS Sample Id: 614638-014 S

Prep Method: SW5030B

Date Prep: 02.20.19

MSD Sample Id: 614638-014 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.000386	0.100	0.0849	85	0.0895	90	70-130	5	35	mg/kg	02.20.19 18:52	
Toluene	<0.000457	0.100	0.0749	75	0.0742	74	70-130	1	35	mg/kg	02.20.19 18:52	
Ethylbenzene	<0.000566	0.100	0.0680	68	0.0655	66	70-130	4	35	mg/kg	02.20.19 18:52	X
m,p-Xylenes	<0.00102	0.200	0.139	70	0.132	66	70-130	5	35	mg/kg	02.20.19 18:52	X
o-Xylene	<0.000345	0.100	0.0671	67	0.0642	64	70-130	4	35	mg/kg	02.20.19 18:52	X

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	108		109		70-130	%	02.20.19 18:52
4-Bromofluorobenzene	102		100		70-130	%	02.20.19 18:52

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

[D] = 100*(C-A) / B
RPD = 200* |(C-E) / (C+E)|
[D] = 100 * (C) / [B]
Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



Chain of Custody

Work Order No:

1015143

Houston, TX (281) 240-4200 Dallas, TX (214) 902-0300 San Antonio, TX (210) 509-3334
 Midland, TX (432-704-5440) EL Paso, TX (915)585-3443 Lubbock, TX (806)794-1296
 Hobbs, NM (575-392-7550) Phoenix, AZ (480-355-0900) Atlanta, GA (770-449-8800) Tampa, FL (813-620-2000)

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Page 1 of 1

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littlell
Company Name:	LT Environmental, Inc., Permian Office	Company Name:	XTD Energy
Address:	3300 North "A" St.	Address:	3001 E. Green St
City, State ZIP:	Midland, TX 79705	City, State ZIP:	Garlsbad, NM 88220
Phone:	432.704.5178/575.800.6754	Email:	abaker@xenco.com & abayer@xenco.com

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐ State of Project:	
Reporting Level: I ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐	Deliverables: EDD ☐ ADAPT ☐ Other:

Project Name:	PLU 420 Battery	Turn Around	☐
Project Number:	012918193	Rush: ☐	
P.O. Number:	2RPS102	Rush: same day	
Sampler's Name:	Anna Byers	Due Date:	

SAMPLE RECEIPT		Temp Blank:	Yes ☐ No ☒	Wet Ice:	Yes ☐ No ☒
Temperature (°C):	0.30.2	Thermometer:	100		
Received Intact:	Yes ☒ No ☐				
Cooler Custody Seals:	Yes ☒ No ☐ N/A	Correction Factor:	-0.1		
Sample Custody Seals:	Yes ☒ No ☐ N/A	Total Containers:			

Sample Identification		Matrix	Date Sampled	Time Sampled	Depth	Number of Containers										Sample Comments																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
BH13		S	2/19	10:25	0.3'	1	X	X	X																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

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 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 1631 / 245.1 / 7470 / 7471 : Hg

Note: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. 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 Xenco. A minimum charge of \$75.00 will be applied to each project and a charge of \$5 for each sample submitted to 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
Anna Byers	Christy L. Elbert	2/19/19 @ 1500	Anna Byers	Christy L. Elbert	2/19/19 @ 1249

ORIGIN ID:CAOA (575) 887-6245 XENCO PAC N MAIL 910 W PIERCE ST CARLSBAD, NM 88220 UNITED STATES US		SHIP DATE: 19FEB19 ACTWGT: 8.00 LB CAD: 101813706NET4100 DIMS: 14x11x7 IN BILL RECIPIENT
TO HOLD FOR XENCO FEDEX EXPRESS SHIP CENTER FEDEX SHIP CENTER 3600 COUNTY RD 1276 S MIDLAND TX 79711 (806) 794-1296 INV/ REF PO:		
DEPT:		
565J210E3D/23AD		

TRK# 7745 0895 2902 0201 41 MAFA TX-US LBB HLD MAFA LBB	WED - 20 FEB HOLD STANDARD OVERNIGHT


After printing this label:

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Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/20/2019 12:49:00 PM

Work Order #: 615143

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 02/20/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/21/2019

Analytical Report 615142

for
LT Environmental, Inc.

Project Manager: Adrian Baker

PLU 420 Battery

012918193

21-FEB-19

Collected By: Client



1211 W. Florida Ave, Midland TX 79701

Xenco-Houston (EPA Lab Code: TX00122):

Texas (T104704215-18-28), Arizona (AZ0765), Florida (E871002-24), Louisiana (03054)
Oklahoma (2017-142)

Xenco-Dallas (EPA Lab Code: TX01468):

Texas (T104704295-18-17), Arizona (AZ0809), Arkansas (17-063-0)

Xenco-El Paso (EPA Lab Code: TX00127): Texas (T104704221-18-14)

Xenco-Lubbock (EPA Lab Code: TX00139): Texas (T104704219-18-18)

Xenco-Midland (EPA Lab Code: TX00158): Texas (T104704400-18-18)

Xenco-San Antonio (EPA Lab Code: TNI02385): Texas (T104704534-18-4)

Xenco Phoenix (EPA Lab Code: AZ00901): Arizona (AZ0757)

Xenco-Phoenix Mobile (EPA Lab Code: AZ00901): Arizona (AZM757)

Xenco-Atlanta (LELAP Lab ID #04176)

Xenco-Tampa: Florida (E87429), North Carolina (483)

Xenco-Lakeland: Florida (E84098)



21-FEB-19

Project Manager: **Adrian Baker**

LT Environmental, Inc.

4600 W. 60th Avenue

Arvada, CO 80003

Reference: XENCO Report No(s): **615142**

PLU 420 Battery

Project Address: Delaware Basin

Adrian Baker:

We are reporting to you the results of the analyses performed on the samples received under the project name referenced above and identified with the XENCO Report Number(s) 615142. All results being reported under this Report Number apply to the samples analyzed and properly identified with a Laboratory ID number. Subcontracted analyses are identified in this report with either the NELAC certification number of the subcontract lab in the analyst ID field, or the complete subcontracted report attached to this report.

Unless otherwise noted in a Case Narrative, all data reported in this Analytical Report are in compliance with NELAC standards. The uncertainty of measurement associated with the results of analysis reported is available upon request. Should insufficient sample be provided to the laboratory to meet the method and NELAC Matrix Duplicate and Matrix Spike requirements, then the data will be analyzed, evaluated and reported using all other available quality control measures.

The validity and integrity of this report will remain intact as long as it is accompanied by this letter and reproduced in full, unless written approval is granted by XENCO Laboratories. This report will be filed for at least 5 years in our archives after which time it will be destroyed without further notice, unless otherwise arranged with you. The samples received, and described as recorded in Report No. 615142 will be filed for 45 days, and after that time they will be properly disposed without further notice, unless otherwise arranged with you. We reserve the right to return to you any unused samples, extracts or solutions related to them if we consider so necessary (e.g., samples identified as hazardous waste, sample sizes exceeding analytical standard practices, controlled substances under regulated protocols, etc).

We thank you for selecting XENCO Laboratories to serve your analytical needs. If you have any questions concerning this report, please feel free to contact us at any time.

Respectfully,

A handwritten signature in black ink that reads 'Jessica Kramer'.

Jessica Kramer

Project Assistant

Recipient of the Prestigious Small Business Administration Award of Excellence in 1994.

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Sample Cross Reference 615142

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id	Matrix	Date Collected	Sample Depth	Lab Sample Id
BH15	S	02-19-19 11:05	0.3 ft	615142-001
BH15A	S	02-19-19 11:25	3.0 ft	615142-002



CASE NARRATIVE

Client Name: LT Environmental, Inc.

Project Name: PLU 420 Battery

Project ID: 012918193

Work Order Number(s): 615142

Report Date: 21-FEB-19

Date Received: 02/20/2019

Sample receipt non conformances and comments:

None

Sample receipt non conformances and comments per sample:

None

Analytical non conformances and comments:

Batch: LBA-3079858 BTEX by EPA 8021B

Soil samples were not received in Terracore kits and therefore were prepared by method 5030.



Certificate of Analysis Summary 615142

LT Environmental, Inc., Arvada, CO

Project Name: PLU 420 Battery

Project Id: 012918193
Contact: Adrian Baker
Project Location: Delaware Basin

Date Received in Lab: Wed Feb-20-19 12:49 pm
Report Date: 21-FEB-19
Project Manager: Jessica Kramer

Analysis Requested	Lab Id:	615142-001	615142-002				
	Field Id:	BH15	BH15A				
	Depth:	0.3- ft	3.0- ft				
	Matrix:	SOIL	SOIL				
	Sampled:	Feb-19-19 11:05	Feb-19-19 11:25				
BTEX by EPA 8021B	Extracted:	Feb-20-19 13:00	Feb-20-19 13:00				
	Analyzed:	Feb-20-19 18:26	Feb-20-19 18:47				
	Units/RL:	mg/kg RL	mg/kg RL				
	Benzene	<0.00200 0.00200	<0.00200 0.00200				
	Toluene	<0.00200 0.00200	<0.00200 0.00200				
	Ethylbenzene	<0.00200 0.00200	<0.00200 0.00200				
	m,p-Xylenes	<0.00401 0.00401	<0.00399 0.00399				
	o-Xylene	<0.00200 0.00200	<0.00200 0.00200				
	Total Xylenes	<0.00200 0.00200	<0.00200 0.00200				
	Total BTEX	<0.00200 0.00200	<0.00200 0.00200				
Inorganic Anions by EPA 300	Extracted:	Feb-20-19 14:00	Feb-20-19 14:00				
	Analyzed:	Feb-20-19 21:28	Feb-20-19 21:34				
	Units/RL:	mg/kg RL	mg/kg RL				
	Chloride	10.8 5.00	25.9 4.98				
TPH by SW8015 Mod	Extracted:	Feb-20-19 13:00	Feb-20-19 13:00				
	Analyzed:	Feb-20-19 21:36	Feb-20-19 21:56				
	Units/RL:	mg/kg RL	mg/kg RL				
	Gasoline Range Hydrocarbons (GRO)	<15.0 15.0	<15.0 15.0				
	Diesel Range Organics (DRO)	19.2 15.0	<15.0 15.0				
	Motor Oil Range Hydrocarbons (MRO)	<15.0 15.0	<15.0 15.0				
	Total TPH	19.2 15.0	<15.0 15.0				

This analytical report, and the entire data package it represents, has been made for your exclusive and confidential use. The interpretations and results expressed throughout this analytical report represent the best judgment of XENCO Laboratories. XENCO Laboratories assumes no responsibility and makes no warranty to the end use of the data hereby presented. Our liability is limited to the amount invoiced for this work order unless otherwise agreed to in writing.

Houston - Dallas - Midland - Tampa - Phoenix - Lubbock - San Antonio - El Paso - Atlanta - New Mexico

Jessica Kramer
Project Assistant



Certificate of Analytical Results 615142

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH15**
 Lab Sample Id: 615142-001

Matrix: Soil
 Date Collected: 02.19.19 11.05

Date Received: 02.20.19 12.49
 Sample Depth: 0.3 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3079943

Date Prep: 02.20.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	10.8	5.00	mg/kg	02.20.19 21.28		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3079924

Date Prep: 02.20.19 13.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 21.36	U	1
Diesel Range Organics (DRO)	C10C28DRO	19.2	15.0	mg/kg	02.20.19 21.36		1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 21.36	U	1
Total TPH	PHC635	19.2	15.0	mg/kg	02.20.19 21.36		1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	91	%	70-135	02.20.19 21.36	
o-Terphenyl	84-15-1	84	%	70-135	02.20.19 21.36	



Certificate of Analytical Results 615142



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH15**
Lab Sample Id: 615142-001

Matrix: Soil
Date Collected: 02.19.19 11.05

Date Received: 02.20.19 12.49
Sample Depth: 0.3 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079858

Prep Method: SW5030B

% Moisture:

Date Prep: 02.20.19 13.00

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
m,p-Xylenes	179601-23-1	<0.00401	0.00401	mg/kg	02.20.19 18.26	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.20.19 18.26	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.20.19 18.26		
4-Bromofluorobenzene	460-00-4	86	%	70-130	02.20.19 18.26		



Certificate of Analytical Results 615142

LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH15A**
 Lab Sample Id: 615142-002

Matrix: Soil
 Date Collected: 02.19.19 11.25

Date Received: 02.20.19 12.49
 Sample Depth: 3.0 ft

Analytical Method: Inorganic Anions by EPA 300

Tech: CHE

Analyst: CHE

Seq Number: 3079943

Date Prep: 02.20.19 14.00

Prep Method: E300P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Chloride	16887-00-6	25.9	4.98	mg/kg	02.20.19 21.34		1

Analytical Method: TPH by SW8015 Mod

Tech: ARM

Analyst: ARM

Seq Number: 3079924

Date Prep: 02.20.19 13.00

Prep Method: TX1005P

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Gasoline Range Hydrocarbons (GRO)	PHC610	<15.0	15.0	mg/kg	02.20.19 21.56	U	1
Diesel Range Organics (DRO)	C10C28DRO	<15.0	15.0	mg/kg	02.20.19 21.56	U	1
Motor Oil Range Hydrocarbons (MRO)	PHCG2835	<15.0	15.0	mg/kg	02.20.19 21.56	U	1
Total TPH	PHC635	<15.0	15.0	mg/kg	02.20.19 21.56	U	1

Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag
1-Chlorooctane	111-85-3	92	%	70-135	02.20.19 21.56	
o-Terphenyl	84-15-1	88	%	70-135	02.20.19 21.56	



Certificate of Analytical Results 615142



LT Environmental, Inc., Arvada, CO

PLU 420 Battery

Sample Id: **BH15A**
Lab Sample Id: 615142-002

Matrix: Soil
Date Collected: 02.19.19 11.25

Date Received: 02.20.19 12.49
Sample Depth: 3.0 ft

Analytical Method: BTEX by EPA 8021B

Tech: SCM

Analyst: SCM

Seq Number: 3079858

Date Prep: 02.20.19 13.00

Prep Method: SW5030B

% Moisture:

Basis: Wet Weight

Parameter	Cas Number	Result	RL	Units	Analysis Date	Flag	Dil
Benzene	71-43-2	<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
Toluene	108-88-3	<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
Ethylbenzene	100-41-4	<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
m,p-Xylenes	179601-23-1	<0.00399	0.00399	mg/kg	02.20.19 18.47	U	1
o-Xylene	95-47-6	<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
Total Xylenes	1330-20-7	<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
Total BTEX		<0.00200	0.00200	mg/kg	02.20.19 18.47	U	1
Surrogate	Cas Number	% Recovery	Units	Limits	Analysis Date	Flag	
4-Bromofluorobenzene	460-00-4	83	%	70-130	02.20.19 18.47		
1,4-Difluorobenzene	540-36-3	87	%	70-130	02.20.19 18.47		



Flagging Criteria



- X** In our quality control review of the data a QC deficiency was observed and flagged as noted. MS/MSD recoveries were found to be outside of the laboratory control limits due to possible matrix /chemical interference, or a concentration of target analyte high enough to affect the recovery of the spike concentration. This condition could also affect the relative percent difference in the MS/MSD.
- B** A target analyte or common laboratory contaminant was identified in the method blank. Its presence indicates possible field or laboratory contamination.
- D** The sample(s) were diluted due to targets detected over the highest point of the calibration curve, or due to matrix interference. Dilution factors are included in the final results. The result is from a diluted sample.
- E** The data exceeds the upper calibration limit; therefore, the concentration is reported as estimated.
- F** RPD exceeded lab control limits.
- J** The target analyte was positively identified below the quantitation limit and above the detection limit.
- U** Analyte was not detected.
- L** The LCS data for this analytical batch was reported below the laboratory control limits for this analyte. The department supervisor and QA Director reviewed data. The samples were either reanalyzed or flagged as estimated concentrations.
- H** The LCS data for this analytical batch was reported above the laboratory control limits. Supporting QC Data were reviewed by the Department Supervisor and QA Director. Data were determined to be valid for reporting.
- K** Sample analyzed outside of recommended hold time.
- JN** A combination of the "N" and the "J" qualifier. The analysis indicates that the analyte is "tentatively identified" and the associated numerical value may not be consistent with the amount actually present in the environmental sample.

** Surrogate recovered outside laboratory control limit.

BRL Below Reporting Limit.

RL Reporting Limit

MDL Method Detection Limit **SDL** Sample Detection Limit **LOD** Limit of Detection

PQL Practical Quantitation Limit **MQL** Method Quantitation Limit **LOQ** Limit of Quantitation

DL Method Detection Limit

NC Non-Calculable

SMP Client Sample **BLK** Method Blank

BKS/LCS Blank Spike/Laboratory Control Sample **BKSD/LCSD** Blank Spike Duplicate/Laboratory Control Sample Duplicate

MD/SD Method Duplicate/Sample Duplicate **MS** Matrix Spike **MSD:** Matrix Spike Duplicate

+ NELAC certification not offered for this compound.

* (Next to analyte name or method description) = Outside XENCO's scope of NELAC accreditation



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

MB Sample Id: 7672210-1-BLK

Matrix: Solid

LCS Sample Id: 7672210-1-BKS

Prep Method: E300P

Date Prep: 02.20.19

LCSD Sample Id: 7672210-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.858	250	233	93	250	100	90-110	7	20	mg/kg	02.20.19 18:29	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

Parent Sample Id: 614972-003

Matrix: Soil

MS Sample Id: 614972-003 S

Prep Method: E300P

Date Prep: 02.20.19

MSD Sample Id: 614972-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	2.72	249	263	105	265	105	90-110	1	20	mg/kg	02.20.19 20:17	

Analytical Method: Inorganic Anions by EPA 300

Seq Number: 3079943

Parent Sample Id: 615062-003

Matrix: Soil

MS Sample Id: 615062-003 S

Prep Method: E300P

Date Prep: 02.20.19

MSD Sample Id: 615062-003 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Chloride	<0.850	248	254	102	269	108	90-110	6	20	mg/kg	02.20.19 18:47	

Analytical Method: TPH by SW8015 Mod

Seq Number: 3079924

MB Sample Id: 7672196-1-BLK

Matrix: Solid

LCS Sample Id: 7672196-1-BKS

Prep Method: TX1005P

Date Prep: 02.20.19

LCSD Sample Id: 7672196-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	942	94	982	98	70-135	4	20	mg/kg	02.20.19 15:00	
Diesel Range Organics (DRO)	<8.13	1000	952	95	983	98	70-135	3	20	mg/kg	02.20.19 15:00	

Surrogate	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	101		125		129		70-135	%	02.20.19 15:00
o-Terphenyl	101		121		124		70-135	%	02.20.19 15:00

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
A = Parent Result
C = MS/LCS Result
E = MSD/LCSD Result

MS = Matrix Spike
B = Spike Added
D = MSD/LCSD % Rec



LT Environmental, Inc.

PLU 420 Battery

Analytical Method: TPH by SW8015 Mod

Seq Number: 3079924

Parent Sample Id: 614849-001

Matrix: Soil

MS Sample Id: 614849-001 S

Prep Method: TX1005P

Date Prep: 02.20.19

MSD Sample Id: 614849-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Gasoline Range Hydrocarbons (GRO)	<8.00	1000	920	92	936	94	70-135	2	20	mg/kg	02.20.19 15:59	
Diesel Range Organics (DRO)	<8.13	1000	946	95	963	96	70-135	2	20	mg/kg	02.20.19 15:59	

Surrogate

	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1-Chlorooctane	125		125		70-135	%	02.20.19 15:59
o-Terphenyl	122		117		70-135	%	02.20.19 15:59

Analytical Method: BTEX by EPA 8021B

Seq Number: 3079858

MB Sample Id: 7672200-1-BLK

Matrix: Solid

LCS Sample Id: 7672200-1-BKS

Prep Method: SW5030B

Date Prep: 02.20.19

LCSD Sample Id: 7672200-1-BSD

Parameter	MB Result	Spike Amount	LCS Result	LCS %Rec	LCSD Result	LCSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00200	0.100	0.118	118	0.107	106	70-130	10	35	mg/kg	02.20.19 16:17	
Toluene	<0.00200	0.100	0.0889	89	0.0971	96	70-130	9	35	mg/kg	02.20.19 16:17	
Ethylbenzene	<0.00200	0.100	0.0977	98	0.0999	99	70-130	2	35	mg/kg	02.20.19 16:17	
m,p-Xylenes	<0.00400	0.200	0.212	106	0.218	108	70-130	3	35	mg/kg	02.20.19 16:17	
o-Xylene	<0.00200	0.100	0.0941	94	0.0946	94	70-130	1	35	mg/kg	02.20.19 16:17	

Surrogate

	MB %Rec	MB Flag	LCS %Rec	LCS Flag	LCSD %Rec	LCSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	90		98		86		70-130	%	02.20.19 16:17
4-Bromofluorobenzene	77		93		95		70-130	%	02.20.19 16:17

Analytical Method: BTEX by EPA 8021B

Seq Number: 3079858

Parent Sample Id: 615142-001

Matrix: Soil

MS Sample Id: 615142-001 S

Prep Method: SW5030B

Date Prep: 02.20.19

MSD Sample Id: 615142-001 SD

Parameter	Parent Result	Spike Amount	MS Result	MS %Rec	MSD Result	MSD %Rec	Limits	%RPD	RPD Limit	Units	Analysis Date	Flag
Benzene	<0.00199	0.0994	0.104	105	0.105	104	70-130	1	35	mg/kg	02.20.19 17:01	
Toluene	<0.00199	0.0994	0.0830	84	0.0825	82	70-130	1	35	mg/kg	02.20.19 17:01	
Ethylbenzene	<0.00199	0.0994	0.0966	97	0.0922	91	70-130	5	35	mg/kg	02.20.19 17:01	
m,p-Xylenes	<0.00398	0.199	0.190	95	0.176	87	70-130	8	35	mg/kg	02.20.19 17:01	
o-Xylene	<0.00199	0.0994	0.0869	87	0.0839	83	70-130	4	35	mg/kg	02.20.19 17:01	

Surrogate

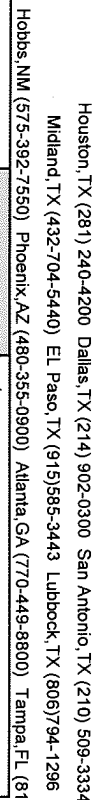
	MS %Rec	MS Flag	MSD %Rec	MSD Flag	Limits	Units	Analysis Date
1,4-Difluorobenzene	123		120		70-130	%	02.20.19 17:01
4-Bromofluorobenzene	100		101		70-130	%	02.20.19 17:01

MS/MSD Percent Recovery
Relative Percent Difference
LCS/LCSD Recovery
Log Difference

$[D] = 100 * (C - A) / B$
 $RPD = 200 * |(C - E) / (C + E)|$
 $[D] = 100 * (C) / [B]$
 Log Diff. = Log(Sample Duplicate) - Log(Original Sample)

LCS = Laboratory Control Sample
 A = Parent Result
 C = MS/LCS Result
 E = MSD/LCSD Result

MS = Matrix Spike
 B = Spike Added
 D = MSD/LCSD % Rec



Chain of Custody

Work Order No.:

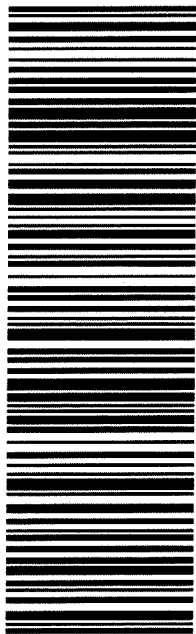
10/5/42

Project Manager:	Adrian Baker	Bill to: (if different)	Kyle Littrell
Company Name:	LT Environmental, Inc., Permian Office	Company Name:	XTD Energy
Address:	3300 North "A" St.	Address:	3104 E. Greene St
City, State ZIP:	Midland, Tx 79705	City, State ZIP:	Parkland, TX 75270
Phone:	432.704.5178 / 545.200.6754	Email:	abaker@ltenv.com & alkyess@ltenv.com

Work Order Comments	
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RC ☐ Superfund ☐	
State of Project:	
Reporting Level II ☐ Level III ☐ ST/UST ☐ RRP ☐ Level IV ☐	
Deliverables: EDD ☐ ADAPT ☐ Other:	

[illegible]

ORIGIN ID:CAOA (575) 887-6245 XENCO PAC N MAIL 910 W PIERCE ST CARLSBAD, NM 88220 UNITED STATES US		SHIP DATE: 19-FEB-19 ACTWGT: 8.00 LB CAD: 101813706/NET4100 DIMS: 14x11x7 IN
TO HOLD FOR XENCO FEDEX EXPRESS SHIP CENTER FEDEX SHIP CENTER 3600 COUNTY RD 1276 S MIDLAND TX 79711 (806) 794-1296 REF:		DEPT:
TRACK# 7745 0895 2902 0201 WED - 20 FEB HOLD STANDARD OVERNIGHT HLD MAFA TX-US LBB		BILL RECIPIENT




565J20E3D/23AD

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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Prelogin/Nonconformance Report- Sample Log-In

Client: LT Environmental, Inc.

Date/ Time Received: 02/20/2019 12:49:00 PM

Work Order #: 615142

Acceptable Temperature Range: 0 - 6 degC

Air and Metal samples Acceptable Range: Ambient

Temperature Measuring device used : R8

Sample Receipt Checklist

Comments

#1 *Temperature of cooler(s)?	.2
#2 *Shipping container in good condition?	Yes
#3 *Samples received on ice?	Yes
#4 *Custody Seals intact on shipping container/ cooler?	N/A
#5 Custody Seals intact on sample bottles?	N/A
#6 *Custody Seals Signed and dated?	N/A
#7 *Chain of Custody present?	Yes
#8 Any missing/extra samples?	No
#9 Chain of Custody signed when relinquished/ received?	Yes
#10 Chain of Custody agrees with sample labels/matrix?	Yes
#11 Container label(s) legible and intact?	Yes
#12 Samples in proper container/ bottle?	Yes
#13 Samples properly preserved?	Yes
#14 Sample container(s) intact?	Yes
#15 Sufficient sample amount for indicated test(s)?	Yes
#16 All samples received within hold time?	Yes
#17 Subcontract of sample(s)?	N/A
#18 Water VOC samples have zero headspace?	N/A

* Must be completed for after-hours delivery of samples prior to placing in the refrigerator

Analyst:

PH Device/Lot#:

Checklist completed by:

Brianna Teel

Date: 02/20/2019

Checklist reviewed by:

Jessica Kramer

Date: 02/20/2019

ATTACHMENT 3: SOIL SAMPLE LOGS

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH01		Date: 1/25/19	
Lat/Long: 32.09588331, -103.77844331		Field Screening: PID & Cl⁻ test strips		Project Name: PLU 420 Battery		RP Number: 2RP5102	
Comments: Pothole on pad				Logged By: Anna Byers		Method: Backhoe PH	
				Hole Diameter: 2.5' x 5.0'		Total Depth: 7.5'	

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
			yes		0			
moist	—	>15000	yes	a	0.5'		caliche	(pad caliche) ↑
moist	—	>15000	yes	b	1'		caliche	light brown, ~~moist~~ , well graded particles m. to c. sand (>15%) ranging to gravel size, odor
dry	—	236.7	no	c	2'		caliche	
dry	—	363.7	no	d	3'		caliche	
dry	—	106.8	no	e	4'		caliche	
dry	—	117.0	no	f	5'		caliche	compact, light brown, dry, well graded particles ranging from m. to c. sand (>15%) to gravel size, no odor
dry	—	577.2	no	g	5.5'		caliche	
dry	—	287.2	no	h	6'		caliche	
dry	—	24.7	no	i	6.5'		caliche	
dry	<205	24.7	no		7.5'		caliche	total depth
					8			
					9			
					10			
					11			
					12			

OB

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH02		Date: 1/25/19		
				Project Name: PLU 420 Battery		RP Number: 2RPS102		
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: Anna Byers		Method: Backhoe PH		
Lat/Long: 32.09511271, -103.77851805		Field Screening: PID & Cl⁻ test strips		Hole Diameter: 2.5' x 5.0'		Total Depth:		
Comments: Pothole on pad								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
moist	—	>5000	yes		0			
					0.5		caliche (pad <u>caliche</u>)	odor
moist	—	>15000	yes	a	2	2'	SW-SM	dark brown, f. to m. size particles, moist, well-graded sand, odor
					4.5			
dry	—	554.6	no	b	5	4.5'	caliche	light brown, caliche, sand (≥15%) to gravel size particles, well graded
					6			
dry	—	276.2	no	c	7	6.5'	caliche	
					8			
dry	—	878.2	no	d	8	8'	caliche	
					9			
dry	—	168.7	no	e	9	9'	caliche	no odor
					10			
dry	<205	64.7	no	f	10	10'	caliche	no odor
					11			
					12			

total depth

AB

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH03		Date: 1/25/19		
Project Name: PLU 420 Battery		RP Number: 2RP5102		Logged By: Anna Byers		Method: Backhoe PH		
Lat/Long: 32.09593874, -103.77843396		Field Screening: PID & Cl⁻ test strips		Hole Diameter: 2.5' x 5.0'		Total Depth:		
Comments: Pothole on pad								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
			yes		0			(pad caliche) ↑
					1			
					2			
dry	—	193.5	no	a	2.5'		caliche	light brown, gravel to boulder size, 5-15% fines, well graded caliche odor
					3			
					4			
dry	—	2655	no	b	4.5'		gypsum	white, dry, soft, fine grained gypsum odor
dry	—	6364	no	c	5.0'		caliche	light brown, m.c. sand (>15%) to odor gravel size particles, caliche (>15%)
dry	—	385.5	no	d	6.0'		caliche	light brown, compact, m.c. sand to gravel sized particles, caliche odor
					7			
dry	<205	671.1	no	e	8.0'			no odor
dry	—	311.3	no	f	9.0'			no odor
					10			
					11			
					12			

total depth ↓

 LT Environmental, Inc. 		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier PH04		Date: 1/25/19		
		Project Name: PLU 420 Battery		RP Number: 2RP5102				
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: Anna Byers		Method: Backhoe PH		
Lat/Long: 32.09598733, -103.77836988		Field Screening: PH & Cl⁻ test strips		Hole Diameter: 2.5' x 5.0'		Total Depth:		
Comments: Pothole on pad								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
			yes		0			
					0.5			↕ pad caliche
dry	—	3023	no	a	1	1'		odor light brown, m.c sand (>15%) to gravel sized particles, well sorted caliche
dry	—	735.1	no	b	2	2'		odor
dry	—	666.0	no	c	3	3'		no odor
dry	<205	61.1	no	d	4	4'		no odor
					5			↓ total depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

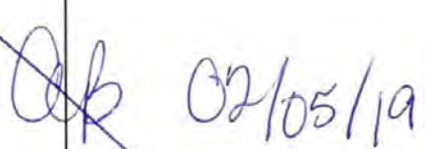
 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH05	Date: 1/25/19					
Project Name: PLU 420 Battery		RP Number: 2RP5102						
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long: 32.09599245, -103.77846666		Field Screening: PID & Cl⁻ test strips	Logged By: Anna Byers Method: Backhoe Pit					
Comments: Pothole on pad		Hole Diameter: 2.5' x 5.0'	Total Depth:					
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
			yes		0			
					0.5'			pad caliche
dry	—	715000	no	a	1	1.5'	caliche	odor light brown, compact, m. h.c.
dry	—	543.3	no	b	2	2'	caliche	odor Sand (>15%) to gravel size particles, well sorted caliche
					3			
dry	<205	159.2	no	c	4	4'	caliche	no odor
					5			total depth
					6			
					7			
					8			
					9			
					10			
					11			
					12			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH06	Date: 2/5/19					
		Project Name: PLU 420 Battery	RP Number: 2RP5102					
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening: PID	Logged By: Anna Byers Method: shovel					
		Hole Diameter: 1' x 1'	Total Depth: 1'					
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D		0	N	PH06	0	0'	SP	no plasticity, dry, tan poorly-graded sand (m.) ↓ + compact TOT DEPTH
		0	N	PH06A	1	1'	SP	
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
				12				

02/05/19

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation					Identifier: PH07		Date: 2/5/19	
					Project Name: PLU 470 Battery		RP Number: 2RP5102	
LITHOLOGIC / SOIL SAMPLING LOG					Logged By: Anna Byers		Method: shovel	
Lat/Long:			Field Screening PID		Hole Diameter: 1.0' x 1.0'		Total Depth: 1'	
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D		0	N	PH07	0	0'	SP	no plasticity, dry tan, compact poorly graded sand (m.) ↓ + compact TOT DEPTH
		0	N	PH07A	1	1'	SP	
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
				12				

 02/05/19

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH08	Date: 2/5/19					
		Project Name: PLU 420 Battery	RP Number: 2RP5102					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: shovel					
Lat/Long:		Field Screening: PID	Hole Diameter: 1"					
Comments: Pasture (outside bermed containment)								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D		0	N	PH08	0	0'	SP	red/brown sand (m.-c.), vegetated, dry, no plasticity
M	<180	0	N	PH08A	1	1'	SP	moist, red/brown sand (m.-c.), no plasticity
TOT DEPTH								
								
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH09	Date: 2/5/19
		Project Name: PLU 420 Battery	RP Number: 2 RPS102
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: shovel
Lat/Long	Field Screening: PID	Hole Diameter: 1' x 1'	Total Depth: 1'
Comments:			
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining
			Sample #
			Depth (ft. bgs.)
			Sample Depth
			Soil/Rock Type
			Lithology/Remarks
D			N PH09 0' SP
D			N PH09A 1' SP
grey sand (m-c.), well poorly graded, no plasticity ↓			
Ob 02/11/19			
			2
			3
			4
			5
			6
			7
			8
			9
			10
			11
			12

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PHB	Date: 2/5/19					
		Project Name: PLU 420 Battery	RP Number: 2RP5102					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byars	Method: shovel					
Lat/Long:		Field Screening: PID	Hole Diameter: 1' x 1'					
Total Depth: 1'								
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D			N		0	0'		grey sand, (m-c.) no plasticity, poorly graded ↓
D			N		1	1'		
					2			
					3			
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			


02/11/19

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH11	Date: 2/15/19					
		Project Name: PLU 420 Battery	RP Number: 2RP5102					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: track hoe					
Lat/Long:		Field Screening: PID	Hole Diameter: 2.5' x 5.0'					
Total Depth: 4'								
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
M		>15000	Y	~~FS13~~	0	~~excavated~~		stained caliche, odor, silt to gravel size
			N	~~X~~	1		SC	brown, clayey sand poorly graded
	<180	>15000	N	~~X~~	2		CL	moist, dark brown/black, low plasticity clay
M	<180	>15000	N	FS13	3			moist, dark brown/black, low plasticity clay
M	<180	0	N	PH11	4		SW	brown, moist, ^{well-} poorly graded sand (f.-c.)
TOT DEPTH								
02/03/19								

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: PH12	Date: 2/5/19					
		Project Name: PLU 400 Battery	RP Number: 2RP5102					
LITHOLOGIC / SOIL SAMPLING LOG								
Lat/Long:		Field Screening: PID	Logged By: Anna Byers Method: shovel & rock bar					
		Hole Diameter: 1.0' x 1.5'	Total Depth: 4.5'					
Comments:								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
M					0			moist, vegetated with tall thin grass, black / dark brown, odor, clayey sand with boulder sized rock fragments (caliche), mod. plasticity
					1			
					2			moist, dark brown clayey sand, rocky
	24077				3		SW-SC	dark brown to black moist, clayey sand, mod. plasticity, boulder sized rocks mixed in (caliche) clumps, twigs & sticks
	24636.8				4	4'	SW	moist brown/red sand, low plasticity (m) top of caliche
				PH12	4.5'		caliche	well cemented, fine-medium grain size matrix, grey to brown, hard, random fracturing, lime stone/dolomite ... or other calcareous inclusions
					5			
					6			
					7			TOT DEPTH
					8			
					9			
					10			
					11			
					12			

 02/05/19

		LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: BH13		Date: 2/19/19		
				Project Name: PLU 420 Battery		RP Number: 2RP5102		
LITHOLOGIC / SOIL SAMPLING LOG				Logged By: Anna Byers		Method: hand auger		
Lat/Long: 32.096080, -103.778375		Field Screening: PID		Hole Diameter: 3"		Total Depth: 3.5'		
Comments: Pasture								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<180	0	Z	BH13	0	0.3'	SP	reddish brown, poorly graded, low ^{no} plasticity sand (c.c); root fragments low plasticity "
M		0		-	1			
		0		-	2			
		0		-	3			
	<180	0		BH13A	3.5'	3.5'	SP	TOT Depth
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: BH14	Date: 2/19/19					
		Project Name: PLU 420 Battery	RP Number: 2 RP 5102					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: hand auger					
Lat/Long: 32.096080, -103.778375		Field Screening: PID	Hole Diameter: 3"					
Total Depth: 3'								
Comments: Pasture								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
D	<180	0	N	BH14	0			
					0.3'		SP	reddish brown, poorly graded, no plasticity sand (c.); root fragments
M		0		-	1			low plasticity " sand (c.)
		0		-	2			
		0			3	3.0'	SP	
M	<180	0		BH14A				 Tot Depth
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

 LT Environmental, Inc. 508 West Stevens Street Carlsbad, New Mexico 88220 Compliance · Engineering · Remediation		Identifier: BH15	Date: 2/19/19					
		Project Name: PLU 420 Battery	RP Number: 2RP 5102					
LITHOLOGIC / SOIL SAMPLING LOG		Logged By: Anna Byers	Method: Hand Auger					
Lat/Long: 32.096080, -103.778375		Field Screening: PID	Hole Diameter: 3"					
Comments: Within berm on pad		Total Depth: 3'						
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample #	Depth (ft. bgs.)	Sample Depth	Soil/Rock Type	Lithology/Remarks
					0	PAD	CALICHE	
D	<3000	0	N	BH15	0.3'	SW		light grey, well graded, no plasticity sand
m		0		-	1	SP		reddish brown, poorly graded, low plasticity sand (c.); root fragments
		0		-	2			
m	<3000	0		BH15A	3	3.0'	SP	↓ TOT Depth
					4			
					5			
					6			
					7			
					8			
					9			
					10			
					11			
					12			

ATTACHMENT 4: PHOTOGRAPHIC LOG





View of release extent on the caliche well pad, facing northeast.

Project: 012918193	XTO Energy, Inc. Poker Lake Unit #420 Battery	 Advancing Opportunity
January 21, 2019	Photographic Log	



View of excavation facing south toward tank battery.

Project: 012918193	XTO Energy, Inc. Poker Lake Unit #420 Battery	 Advancing Opportunity
February 5, 2019	Photographic Log	



View of excavation facing northeast toward pasture.

Project: 012918193	XTO Energy, Inc. Poker Lake Unit #420 Battery	 Advancing Opportunity
February 5, 2019	Photographic Log	

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

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

CONDITIONS

Action 262816

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 262816
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	9/26/2023