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	NAPP2316047464
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

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

Location of Release Source

Latitude 32.21356 Longitude -103.86040
(NAD 83 in decimal degrees to 5 decimal places)

Site Name PLU C-1	Site Type Recycle Facility
Date Release Discovered 05/29/2023	API# *(if applicable)*

Unit Letter	Section	Township	Range	County
P	15	24S	30E	Eddy

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

Nature and Volume of Release

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

☐ Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
☒ Produced Water	Volume Released (bbls) 57.58	Volume Recovered (bbls) 0.00
	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 Mechanical failure on pump flange caused fluids to release to soil No fluid was recovered due to soil saturation. A third-party contractor has been retained for remediation purposes.

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316047464
District RP	
Facility ID	
Application ID	

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

If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)?
Yes, by Garrett Green to Enviro, OCD, EMNRD; Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD on Tuesday, May 30, 2023 10:24 PM via email.

Initial Response

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

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

If all the actions described above have not been undertaken, explain why:
NA

Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green
Title: SSHE Coordinator
Signature:
Date: 06/09/2023
email: garrett.green@exxonmobil.com
Telephone: 575-200-0729

OCD Only

Received by:
Date:

Location:	PLU C-1	
Spill Date:	5/29/2023	

Area 1		
Approximate Area =	3546.00	sq. ft.
Average Saturation (or depth) of spill =	4.00	inches
Average Porosity Factor =	0.10	
VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	21.05	bbls

Area 2		
Approximate Area =	8204.00	sq. ft.
Average Saturation (or depth) of spill =	3.00	inches

Average Porosity Factor =	0.10	

VOLUME OF LEAK		
Total Crude Oil =	0.00	bbls
Total Produced Water =	36.53	bbls

TOTAL VOLUME OF LEAK		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**57.58**	**bbls**
TOTAL VOLUME RECOVERED		
Total Crude Oil =	**0.00**	**bbls**
Total Produced Water =	**0.00**	**bbls**

Incident ID	NAPP2316047464
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

What is the shallowest depth to groundwater beneath the area affected by the release?	>105 (ft bgs)
Did this release impact groundwater or surface water?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ☒ No
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ☒ No
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ☒ No
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ☒ No
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ☒ No
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ☒ No
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ☒ No
Are the lateral extents of the release overlying an unstable area such as karst geology?	☐ Yes ☒ No
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ☒ No
Did the release impact areas **not** on an exploration, development, production, or storage site?	☒ Yes ☐ No

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

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

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

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

State of New Mexico
Oil Conservation Division

Incident ID	NAPP2316047464
District RP	
Facility ID	
Application ID	

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Printed Name: Garrett Green Title: SSHE Coordinator

Signature: Date: Nov 22 2023

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

OCD Only

Received by: Shelly Wells Date: 11/27/2023

Incident ID	NAPP2316047464
District RP	
Facility ID	
Application ID	

Remediation Plan

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

- [x] Detailed description of proposed remediation technique
- [x] Scaled sitemap with GPS coordinates showing delineation points
- [x] Estimated volume of material to be remediated
- [x] Closure criteria is to Table 1 specifications subject to 19.15.29.12(C)(4) NMAC
- [x] 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: Garrett Green Title: SSHE Coordinator

Signature:  Date: Nov 22 2023

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

OCD Only

Received by: Shelly Wells Date: 11/27/2023

- [ ] Approved
- [ ] Approved with Attached Conditions of Approval
- [ ] Denied
- [ ] Deferral Approved

Signature: _____ Date: _____

ENSOLUM

November 20, 2023

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

Re: Remediation Work Plan
PLU C-1
Incident Number NAPP2316047464
Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared the following *Remediation Work Plan (Work Plan)* to document initial assessment activities completed to date and propose remedial actions to address impacted soil identified at the PLU C-1 (Site).

RELEASE SUMMARY AND BACKGROUND

The Site is located in Unit P, Section 15, Township 24 South, Range 30 East, in Eddy County, New Mexico (32.21356°, -103.86040°) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On May 29, 2023, mechanical failure of a pump flange caused the release of approximately 57.58 barrels (bbls) of produced water along a pipeline right-of-way (ROW). Free-standing fluids were not able to be recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on May 30, 2023, and submitted a Release Notification Form C-141 (Form C-141) on June 9, 2023. The release was assigned Incident Number NAPP2316047464.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized to assess the applicability of Table I, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29 (19.15.29) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential Site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is a soil boring permitted by the New Mexico Office of the State Engineer (NMOSE). The soil boring (C-4575) is located approximately 0.65 miles southeast of the Site and was completed on January 4, 2022 as a depth to water boring assessment. The soil boring was drilled to a depth of 105 feet bgs and no groundwater was encountered. Based on the recently installed soil boring, depth to water at the Site is reasonably estimated to be greater than 100 feet bgs. The well record is included in Appendix A and all wells used to evaluate depth to groundwater are presented on Figure 1.

The closest continuously flowing or significant watercourse is greater than 300 feet from the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an

occupied residence, school, hospital, institution, church, significant water course, or wetland. The Site is greater than 1,000 feet from a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area).

Based on the closest depth to groundwater data exceeding a distance of 0.5 miles from the Site, as preferred by the NMOCD, the following Table I Closure Criteria (Closure Criteria) apply:

- Benzene: 10 milligrams per kilogram (mg/kg)
- Benzene, toluene, ethylbenzene, and total xylenes (BTEX): 50 mg/kg
- Total petroleum hydrocarbons (TPH): 100 mg/kg
- Chloride: 600 mg/kg

SITE ASSESSMENT AND DELINEATION ACTIVITIES

On July 17, 2023, Site assessment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. An excavation, related to the pipeline operations, existed near the point of release. Two soil samples were collected (SS01 and SS01A) at the base of the existing excavation at depths of 12 feet and 13 feet bgs, respectively, to assess the presence or absence of contaminants of concern (COCs) at concentrations that exceed the Closure Criteria. A total of five additional soil samples (SS02 through SS06) were collected within the release extent at depth of 0.5 feet bgs, to assess surficial soil within the release. Lateral soil samples (SS07 through SS12) were collected outside of the release extent to define the release extent. Soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride using Hach® chloride QuanTab® test strips. The release extent and soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. A photographic log of Site conditions is included as Appendix B.

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

Ensolum returned to the Site on August 10, 2023, to assess soil vertically within the release extent. Boreholes BH02 through BH06 were advanced via hand auger in the vicinity of surface soil samples SS02 through SS06, respectfully. Soil was field screened for VOCs and chloride and samples were collected at depths ranging from 1-foot to 4 feet bgs. Soil samples were submitted for laboratory analysis as described above. Field screening results and observations for the boreholes were logged on lithologic soil sampling logs, which are included in Appendix C. Borehole locations are depicted on Figure 2.

Laboratory analytical results for assessment soil samples SS01 and SS01A, collected at the base of the existing excavation, completed prior to the release by XTO's pipeline operations group and located immediately adjacent to the point of release, indicated all COC concentrations were in compliance with the Closure Criteria, confirming the absence of impacted soil in this area. In order to protect the structural integrity of the production equipment installed, the excavation was backfilled following a review of the laboratory analytical results. Laboratory analytical results for surficial soil samples SS02 through SS06,

collected within the release extent at 0.5 feet bgs, indicated the chloride concentrations in all five soil samples exceeded the Closure Criteria. Laboratory analytical results for vertical soil samples collected within the release extent indicated all COC concentrations were in compliance with the Closure Criteria, with the exception of BH03, collected at 4 feet bgs. Laboratory analytical results for lateral soil samples SS07 through SS12 indicated all COC concentrations were in compliance with the Closure Criteria. Soil analytical results from delineation activities are summarized on Table 1. The full laboratory analytical reports are included in Appendix D.

Based on laboratory analytical results of delineation soil samples collected within the release extent, soil containing chloride at concentrations greater than 600 mg/kg, is present within the release extent at depths ranging from the ground surface to a maximum depth of 4 feet bgs. As such, excavation appears warranted.

PROPOSED REMEDIATION WORK PLAN

Ensolum completed delineation activities at the Site to assess soil conditions following a May 2023 release of produced water within a pipeline ROW on federal land. Assessment activities indicates chloride concentrations in soil at the ground surface to 4 feet bgs do exceed the Closure Criteria, which requires excavation, backfilling with non-waste containing soil and reseeding to fully reclaim the Site. XTO is proposing the following remedial actions to address the May 2023 release:

- Excavate impacted soil to a depth of 4 feet bgs within the release extent footprint as depicted on Figure 2;
- Collect confirmation samples at the sampling frequency of one 5-point composite soil sample every 200 square feet along the excavation floor and sidewalls to confirm the proper removal of impacted soil;
- Backfill and recontour the fully excavated area to match pre-existing conditions;
- Re-seed the backfilled area with a BLM-approved seed mixture.

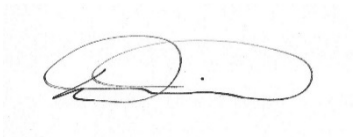
The release extent area covers approximate 8,200 square feet and estimating an average of 2 feet vertically to remove waste-containing soil, an estimated 600 cubic yards of soil will be excavated and properly transported to a New Mexico approved landfill facility for disposal. The remedial/reclamation approach described is believed to be protective of human health, the environment, and groundwater.

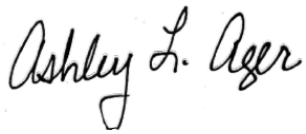
PROPOSED SCHEDULE

XTO will complete excavation and confirmation soil sampling and will submit a *Closure Request* within 90 days following approval of the *Work Plan* from NMOCD.

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
Tommee Lambert, XTO
BLM

Appendices:

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

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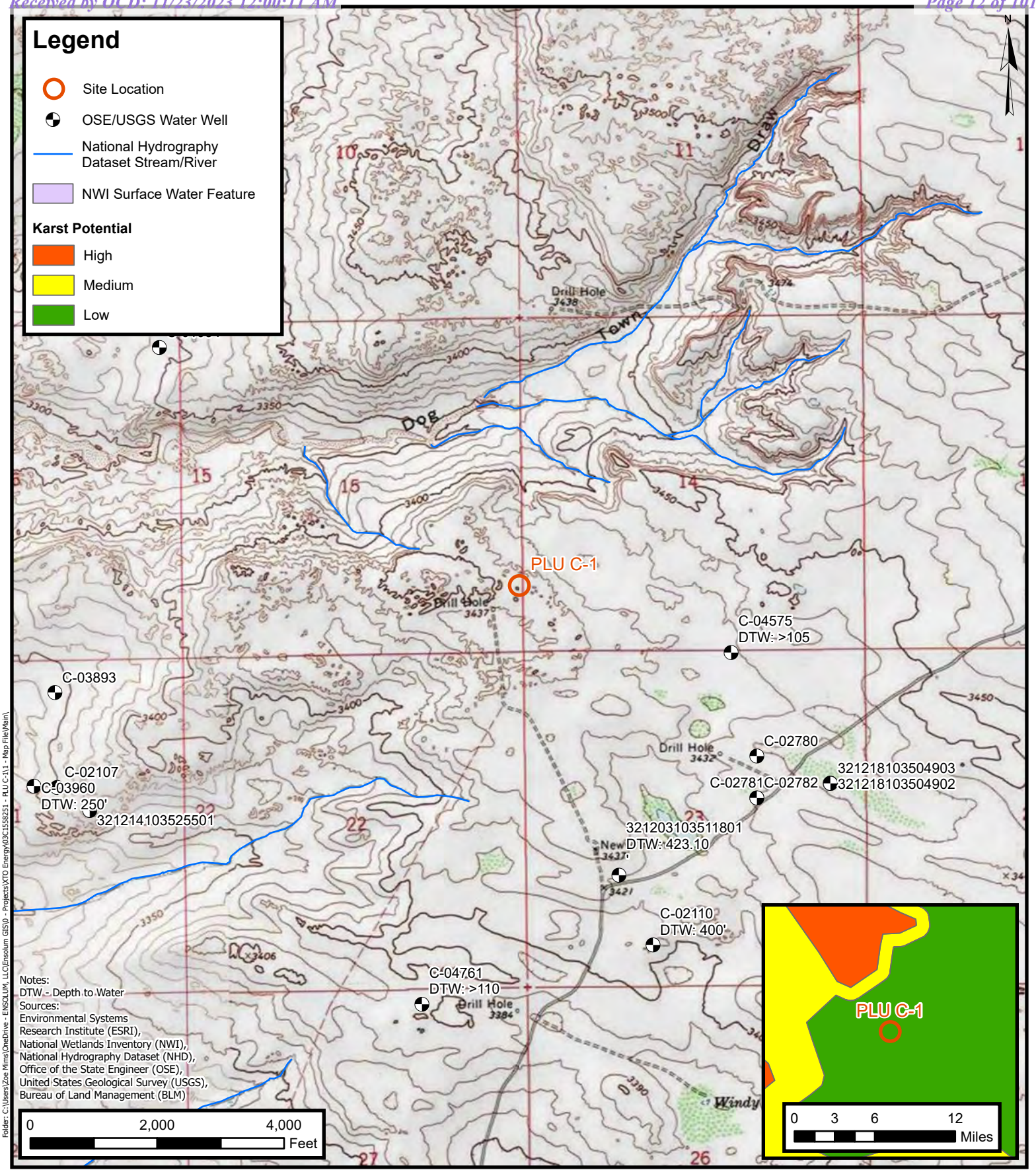
Figures



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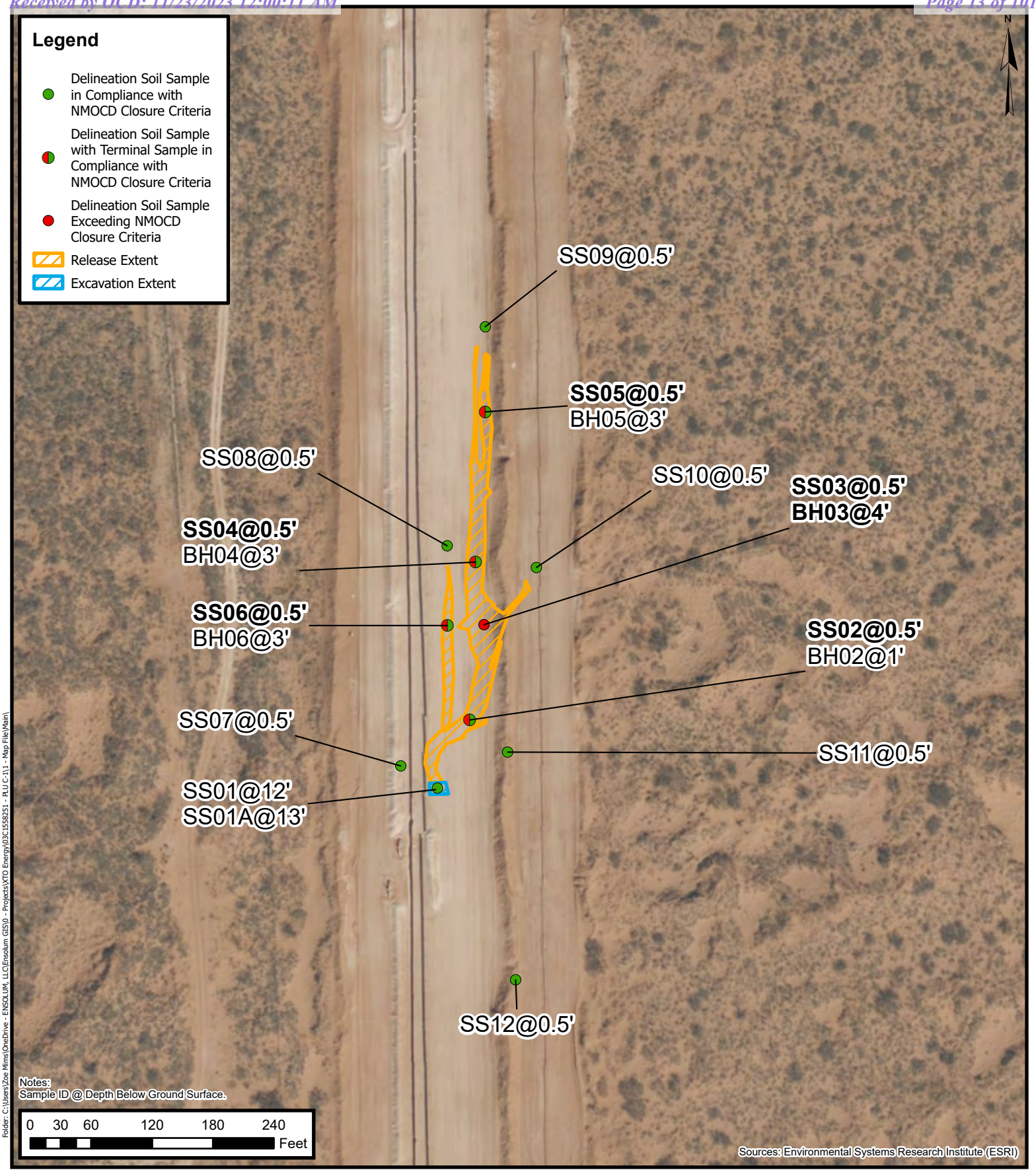
ENSOLUM
Environmental, Engineering and Hydrogeologic Consultants

Site Receptor Map

XTO Energy, Inc.
PLU C-1
Incident Number: NAPP2316047464
Unit P, Sec 15, T24S, R30E
Eddy County, New Mexico

FIGURE 1



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Delineation Soil Sample Locations

XTO Energy, Inc.
PLU C-1
Incident Number: NAPP2316047464
Unit P, Sec 15, T24S, R30E
Eddy County, New Mexico

FIGURE 2

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Table

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TABLE 1
SOIL SAMPLE ANALYTICAL RESULTS
PLU C-1
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	NE	100	600
Delineation Soil Samples										
SS01	07/17/2023	12	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	71.7
SS01A	07/17/2023	13	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	68.0
SS02	07/17/2023	0.5	<0.00202	<0.00403	<50.4	<50.4	<50.4	<50.4	<50.4	**2,210**
BH02	08/10/2023	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	307
SS03	07/17/2023	0.5	<0.00201	<0.00402	<50.2	<50.2	<50.2	<50.2	<50.2	**2,480**
BH03	08/10/2023	4	<0.00200	<0.00401	<49.7	<49.7	<49.7	<49.7	<49.7	**1,340**
SS04	07/17/2023	0.5	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	**802**
BH04	08/10/2023	3	<0.00201	<0.00402	<50.3	<50.3	<50.3	<50.3	<50.3	182
SS05	07/17/2023	0.5	<0.00202	<0.00404	<49.6	<49.6	<49.6	<49.6	<49.6	**3,080**
BH05	08/10/2023	3	<0.00199	<0.00398	<50.1	<50.1	<50.1	<50.1	<50.1	101
SS06	07/17/2023	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	**1,580**
BH06	08/10/2023	3	<0.00198	<0.00396	<50.4	<50.4	<50.4	<50.4	<50.4	327
SS07	07/17/2023	0.5	<0.00200	<0.00399	<50.5	<50.5	<50.5	<50.5	<50.5	60.5
SS08	07/17/2023	0.5	<0.00200	<0.00399	<50.4	<50.4	<50.4	<50.4	<50.4	40.1
SS09	07/17/2023	0.5	<0.00202	<0.00403	<50.3	<50.3	<50.3	<50.3	<50.3	38.9
SS10	07/17/2023	0.5	<0.00199	<0.00398	<49.6	<49.6	<49.6	<49.6	<49.6	50.5
SS11	07/17/2023	0.5	<0.00200	<0.00399	<49.6	<49.6	<49.6	<49.6	<49.6	29.7
SS12	07/17/2023	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	26.2

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

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

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

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

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APPENDIX A

Well Log Record

WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

www.ose.state.nm.us

OSE DIT JAN 24 2022 PM3:00

1. GENERAL AND WELL LOCATION

OSE POD NO. (WELL NO.)	WELL TAG ID NO.	OSE FILE NO(S).
POD1 (BH-01)	n/a	C-4575

WELL OWNER NAME(S)	PHONE (OPTIONAL)
XTO Energy (Kyle Littrell)	

WELL OWNER MAILING ADDRESS	CITY	STATE	ZIP
6401 Holiday Hill Dr.	Midland	TX	79707

WELL LOCATION (FROM GPS)		DEGREES	MINUTES	SECONDS	
	LATITUDE	32	12	38.03	N
	LONGITUDE	103	50	58.70	W

* ACCURACY REQUIRED: ONE TENTH OF A SECOND
* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS – PLSS (SECTION, TOWNSHJIP, RANGE) WHERE AVAILABLE

NW NE Sec. 23 T24S R30E, NMPM

2. DRILLING & CASING INFORMATION

LICENSE NO.	NAME OF LICENSED DRILLER	NAME OF WELL DRILLING COMPANY
1249	Jackie D. Atkins	Atkins Engineering Associates, Inc.

DRILLING STARTED	DRILLING ENDED	DEPTH OF COMPLETED WELL (FT)	BORE HOLE DEPTH (FT)	DEPTH WATER FIRST ENCOUNTERED (FT)
1-4-2022	1-4-2022	temporary well material	105	n/a

COMPLETED WELL IS: ☐ ARTESIAN ☑ DRY HOLE ☐ SHALLOW (UNCONFINED)

STATIC WATER LEVEL IN COMPLETED WELL (FT): n/a

DRILLING FLUID: ☐ AIR ☐ MUD ADDITIVES – SPECIFY:

DRILLING METHOD: ☐ ROTARY ☐ HAMMER ☐ CABLE TOOL ☑ OTHER – SPECIFY: Hollow Stem Auger

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
0	105	±8.5	Boring- HSA	--	--	--	--

3. ANNULAR MATERIAL

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

FOR OSE INTERNAL USE

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

FILE NO. C-4575	POD NO. 1	TRN NO. 709414	
LOCATION 2-1-1 24S-30E-23		WELL TAG ID NO. —	PAGE 1 OF 2

MON

OSE DII JAN 24 2022 PM 3:00

4. HYDROGEOLOGIC LOG OF WELL

DEPTH (feet bgl) FROM	DEPTH (feet bgl) TO	THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)	ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
0	1	1	Caliche, White, Dry	Y ✓ N	
1	20	19	Sand, very fine grained, well graded, with caliche, Reddish Brown-Light Brown	Y N	
20	30	20	Caliche, consolidated with silt and some gravel, Off-White, Dry	Y ✓ N	
30	50	20	Sand, very fine grained, well graded, with gravel, Light Brown	Y ✓ N	
50	75	25	Sand, very fine grained, well graded, with gravel, Reddish Brown, slight moist	Y ✓ N	
75	105	30	Sand, very fine grained, poorly graded, Reddish Brown, slight moist	Y ✓ N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	
				Y N	

METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA:

☐ PUMP ☐ AIR LIFT ☐ BAILER ☐ OTHER – SPECIFY:

TOTAL ESTIMATED WELL YIELD (gpm): 0.00

5. TEST; RIG SUPERVISION

WELL TEST — TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.

MISCELLANEOUS INFORMATION: Temporary well materials removed and the soil boring backfilled using drill cuttings from total depth to ten feet below ground surface, then hydrated bentonite chips from ten feet below ground surface to surface. Logs adapted from WSP on-site geologist.

PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:

Shane Eldridge, Cameron Pruitt, Carmelo Trevino

6. SIGNATURE

THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 30 DAYS AFTER COMPLETION OF WELL DRILLING:

Jack Atkins — Jackie D. Atkins — 1/21/2022

SIGNATURE OF DRILLER / PRINT SIGNEE NAME — DATE

FOR OSE INTERNAL USE — WR-20 WELL RECORD & LOG (Version 06/30/2017)

FILE NO. C-4573	POD NO. 1	TRN NO. 709414	
LOCATION 2-1-1 24S-30E-23		WELL TAG ID NO.	PAGE 2 OF 2

MON

OSE_Well Record and Log_-forsign

Final Audit Report 2022-01-22

Created:	2022-01-21
By:	Lucas Middleton (lucas@atkinseng.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAHFW29aZiQH1D931B0LxyAz3o1wYi88ri

"OSE_Well Record and Log_-forsign" History

OSE DIT JAN 24 2022 PM3:00

Document created by Lucas Middleton (lucas@atkinseng.com)
2022-01-21 - 10:47:34 PM GMT- IP address: 69.21.248.123

Document emailed to Jack Atkins (jack@atkinseng.com) for signature
2022-01-21 - 10:48:19 PM GMT

Email viewed by Jack Atkins (jack@atkinseng.com)
2022-01-21 - 10:49:13 PM GMT- IP address: 64.90.153.232

Document e-signed by Jack Atkins (jack@atkinseng.com)
Signature Date: 2022-01-22 - 0:16:23 AM GMT - Time Source: server- IP address: 64.90.153.232

Agreement completed.
2022-01-22 - 0:16:23 AM GMT

Adobe Sign

ENSOLUM

APPENDIX B

Photographic Log

ENSOLUM

Photographic Log
XTO Energy, Inc
PLU C-1
Incident Number NAPP2316047464

Photograph 1 Date: 7/17/2023
Description: Release extent
View: North

Photograph 2 Date: 7/17/2023
Description: Initial excavation of saturated soil
View: Northeast

Photograph 3 Date: 7/17/2023
Description: Sandy access road to release extent
View: South

Photograph 4 Date:7/17/2023
Description: Additional view of initial excavation
View: East-Southeast

ENSOLUM

Photographic Log
XTO Energy, Inc
PLU C-1
Incident Number NAPP2316047464

Photograph 5 Date: 8/10/2023
Description: Vertical delineation activities (BH02)
View: South

Photograph 6 Date: 8/10/2023
Description: Vertical delineation activities (BH03)
View: Northeast

ENSOLUM

APPENDIX C

Lithologic / Soil Sampling Logs

ENSOLUM

	Sample Name: SS02/BH02	Date: 8/10/2023
	Site Name: PLU C-1 Recycle Facility	
	Incident Number: nAPP2316047464	
	Job Number: 03C1558251	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.213714, -103.860711	Hole Diameter: 6"	Total Depth: 1.0'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	3020	0.0	N	SS02	0.5	0.5	SW	Sand. Reddish brown, very fine to fine grained, well graded, dry.
D	246.4	0.0	N	BH02	1	1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.

Total Depth @ 1' bgs

ENSOLUM

	Sample Name: SS03/BH03	Date: 8/10/2023
	Site Name: PLU C-1 Recycle Facility	
	Incident Number: nAPP2316047464	
	Job Number: 03C1558251	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.213982, -103.860657	Hole Diameter: 6"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1982	0.0	N	SS03	0.5	0.5	SW	Sand. Reddish brown, very fine to fine grained, well graded, dry.
D	1,389	0.0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	2,145	0.0	N			2		
D	2,464	0.0	N			3		
D	1,193	0.0	N	BH03	4	4		

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM

	Sample Name: SS04/BH04	Date: 8/10/2023
	Site Name: PLU C-1 Recycle Facility	
	Incident Number: nAPP2316047464	
	Job Number: 03C1558251	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.214155, -103.860682	Hole Diameter: 6"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	952	0.0	N	SS04	0.5	0.5	SW	Sand. Reddish brown, very fine to fine grained, well graded, dry.
D	1,613	0.0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	1,019	0.0	N			2		
D	179.2	0.0	N	BH04	3	3		
D	<179	0.0	N			4		

Total Depth @ 4' bgs. Hand auger refusal at 4' bgs.

ENSOLUM

	Sample Name: SS05/BH05	Date: 8/10/2023
	Site Name: PLU C-1 Recycle Facility	
	Incident Number: nAPP2316047464	
	Job Number: 03C1558251	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.214559, -103.860645	Hole Diameter: 6"	Total Depth: 3'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	4452	0.0	N	SS05	0.5	0.5	SW	Sand. Reddish brown, very fine to fine grained, well graded, dry.
D	1,103	0.0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	448	0.0	N			2		
D	<179	0.0	N	BH05	3	3		

Total Depth @ 3' bgs

ENSOLUM

	Sample Name: SS06/BH06	Date: 8/10/2023
	Site Name: PLU C-1 Recycle Facility	
	Incident Number: nAPP2316047464	
	Job Number: 03C1558251	
LITHOLOGIC / SOIL SAMPLING LOG	Logged By: M. O'Dell	Method: Hand Auger
Coordinates: 32.213980, -103.860771	Hole Diameter: 6"	Total Depth: 4'

Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. All chloride measurements done with a + 40% correction factor.

Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Descriptions
D	1725	0.0	N	SS06	0.5	0.5	SW	Sand. Reddish brown, very fine to fine grained, well graded, dry.
D	1,501	0.0	N			1	SP	Sand. Reddish brown, very fine to fine grained, poorly graded, dry.
D	1,999	0.0	N			2		
D	498	0.0	N	BH06	3	3		
D	790	0.0	N			4		

Total Depth @ 4' bgs. Hand auger refusal @ 4' bgs.

ENSOLUM

APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/2/2023 1:48:17 PM Revision 1

JOB DESCRIPTION

PLU C-1 RECYCLE FACILITY
SDG NUMBER 03C1558251

JOB NUMBER

890-4956-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

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
8/2/2023 1:48:17 PM
Revision 1

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

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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

HPLC/IC

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

Glossary

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

Case Narrative

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Job ID: 890-4956-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-4956-1

REVISION

The report being provided is a revision of the original report sent on 7/28/2023. The report (revision 1) is being revised due to Per client email, it is beleived that SS02 and SS07 were inadvertently swicthed.

Receipt
The samples were received on 7/17/2023 4:11 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: SS01 (890-4956-1), SS01A (890-4956-2), SS07 (890-4956-3), SS03 (890-4956-4), SS04 (890-4956-5), SS05 (890-4956-6), SS06 (890-4956-7), SS02 (890-4956-8), SS08 (890-4956-9), SS09 (890-4956-10), SS10 (890-4956-11), SS11 (890-4956-12) and SS12 (890-4956-13).

GC VOA
Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-4956-A-12-D MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The continuing calibration verification (CCV) associated with batch 880-58267 recovered above the upper control limit for m-Xylene & p-Xylene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-58267/2).

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-58153 and analytical batch 880-58267 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 continuing calibration verification (CCV) associated with batch 880-58267 recovered above the upper control limit for Benzene. An acceptable CCV was ran within the 12 hour window, therefore the data has been qualified and reported. The associated sample is impacted: (CCV 880-58267/51).

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: SS01A (890-4956-2), (890-4929-A-1-C), (890-4929-A-1-D MS) and (890-4929-A-1-E MSD). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS01

Date Collected: 07/17/23 10:00
Date Received: 07/17/23 16:11
Sample Depth: 12

Lab Sample ID: 890-4956-1
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 12:40	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 12:40	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 12:40	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 14:04	07/22/23 12:40	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 12:40	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 14:04	07/22/23 12:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*92*		*70 - 130*	*07/20/23 14:04*	*07/22/23 12:40*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*07/20/23 14:04*	*07/22/23 12:40*	*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			07/24/23 09:30	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			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8		mg/Kg		07/20/23 15:43	07/27/23 14:45	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8		mg/Kg		07/20/23 15:43	07/27/23 14:45	1
Oil Range Organics (Over C28-C36)	<49.8	U	49.8		mg/Kg		07/20/23 15:43	07/27/23 14:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*07/20/23 15:43*	*07/27/23 14:45*	*1*
o-Terphenyl	*114*		*70 - 130*	*07/20/23 15:43*	*07/27/23 14:45*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**71.7**		4.97		mg/Kg			07/20/23 10:01	1

Client Sample ID: SS01A

Date Collected: 07/17/23 10:05
Date Received: 07/17/23 16:11
Sample Depth: 13

Lab Sample ID: 890-4956-2
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 16:27	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 16:27	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 16:27	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 16:27	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 16:27	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 16:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*78*		*70 - 130*	*07/20/23 14:04*	*07/22/23 16:27*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS01A

Date Collected: 07/17/23 10:05
Date Received: 07/17/23 16:11
Sample Depth: 13

Lab Sample ID: 890-4956-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*92*		*70 - 130*	*07/20/23 14:04*	*07/22/23 16:27*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 15:07	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 15:07	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 15:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*131*	*S1+*	*70 - 130*	*07/20/23 15:43*	*07/27/23 15:07*	*1*
o-Terphenyl	*117*		*70 - 130*	*07/20/23 15:43*	*07/27/23 15:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**68.0**		5.00	mg/Kg			07/20/23 10:16	1

Client Sample ID: SS07

Date Collected: 07/17/23 09:20
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		07/20/23 14:04	07/22/23 16:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		07/20/23 14:04	07/22/23 16:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		07/20/23 14:04	07/22/23 16:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		07/20/23 14:04	07/22/23 16:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		07/20/23 14:04	07/22/23 16:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		07/20/23 14:04	07/22/23 16:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*75*		*70 - 130*	*07/20/23 14:04*	*07/22/23 16:48*	*1*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*	*07/20/23 14:04*	*07/22/23 16:48*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.5	U	50.5	mg/Kg			07/28/23 11:50	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS07

Date Collected: 07/17/23 09:20
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-3
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.5	U	50.5		mg/Kg		07/20/23 15:43	07/27/23 15:29	1
Diesel Range Organics (Over C10-C28)	<50.5	U	50.5		mg/Kg		07/20/23 15:43	07/27/23 15:29	1
Oil Range Organics (Over C28-C36)	<50.5	U	50.5		mg/Kg		07/20/23 15:43	07/27/23 15:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*126*		*70 - 130*	*07/20/23 15:43*	*07/27/23 15:29*	*1*
o-Terphenyl	*111*		*70 - 130*	*07/20/23 15:43*	*07/27/23 15:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**60.5**		4.99		mg/Kg			07/20/23 10:22	1

Client Sample ID: SS03

Date Collected: 07/17/23 09:25
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-4
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201		mg/Kg		07/20/23 14:04	07/22/23 17:08	1
Toluene	<0.00201	U	0.00201		mg/Kg		07/20/23 14:04	07/22/23 17:08	1
Ethylbenzene	<0.00201	U	0.00201		mg/Kg		07/20/23 14:04	07/22/23 17:08	1
m-Xylene & p-Xylene	<0.00402	U	0.00402		mg/Kg		07/20/23 14:04	07/22/23 17:08	1
o-Xylene	<0.00201	U	0.00201		mg/Kg		07/20/23 14:04	07/22/23 17:08	1
Xylenes, Total	<0.00402	U	0.00402		mg/Kg		07/20/23 14:04	07/22/23 17:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:08*	*1*
1,4-Difluorobenzene (Surr)	*74*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:08*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.2	U	50.2		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.2	U	50.2		mg/Kg		07/20/23 15:43	07/27/23 16:13	1
Diesel Range Organics (Over C10-C28)	<50.2	U	50.2		mg/Kg		07/20/23 15:43	07/27/23 16:13	1
Oil Range Organics (Over C28-C36)	<50.2	U	50.2		mg/Kg		07/20/23 15:43	07/27/23 16:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*122*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:13*	*1*
o-Terphenyl	*103*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:13*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS03
Date Collected: 07/17/23 09:25
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-4
Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2480		25.1		mg/Kg			07/20/23 10:57	5

Client Sample ID: SS04
Date Collected: 07/17/23 09:30
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-5
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 17:29	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 17:29	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 17:29	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		07/20/23 14:04	07/22/23 17:29	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 17:29	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		07/20/23 14:04	07/22/23 17:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:29*	*1*
1,4-Difluorobenzene (Surr)	*75*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:29*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		07/20/23 15:43	07/27/23 16:34	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		07/20/23 15:43	07/27/23 16:34	1
Oil Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		07/20/23 15:43	07/27/23 16:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*118*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:34*	*1*
o-Terphenyl	*101*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:34*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	802		5.03		mg/Kg			07/20/23 11:02	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS05

Date Collected: 07/17/23 09:35
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-6
Matrix: Solid

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		07/20/23 14:04	07/22/23 17:49	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 17:49	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 17:49	1
m-Xylene & p-Xylene	<0.00404	U	0.00404		mg/Kg		07/20/23 14:04	07/22/23 17:49	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 17:49	1
Xylenes, Total	<0.00404	U	0.00404		mg/Kg		07/20/23 14:04	07/22/23 17:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*89*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:49*	*1*
1,4-Difluorobenzene (Surr)	*70*		*70 - 130*	*07/20/23 14:04*	*07/22/23 17:49*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 16:56	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 16:56	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 16:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*120*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:56*	*1*
o-Terphenyl	*102*		*70 - 130*	*07/20/23 15:43*	*07/27/23 16:56*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3080**		25.0		mg/Kg			07/20/23 11:07	5

Client Sample ID: SS06

Date Collected: 07/17/23 09:40
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-7
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 18:10	1
Toluene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 18:10	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 18:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 18:10	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 18:10	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*90*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:10*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS06

Date Collected: 07/17/23 09:40
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-7

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*72*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:10*	*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			07/24/23 09:30	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			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 17:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 17:18	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 17:18	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*07/20/23 15:43*	*07/27/23 17:18*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/20/23 15:43*	*07/27/23 17:18*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1580**		25.1	mg/Kg			07/20/23 11:12	5

Client Sample ID: SS02

Date Collected: 07/17/23 10:40
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-8

Matrix: Solid

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		07/20/23 14:04	07/22/23 18:30	1
Toluene	<0.00202	U	0.00202	mg/Kg		07/20/23 14:04	07/22/23 18:30	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		07/20/23 14:04	07/22/23 18:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		07/20/23 14:04	07/22/23 18:30	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		07/20/23 14:04	07/22/23 18:30	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		07/20/23 14:04	07/22/23 18:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:30*	*1*
1,4-Difluorobenzene (Surr)	*80*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:30*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4	mg/Kg			07/28/23 11:50	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS02

Date Collected: 07/17/23 10:40
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-8
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	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 17:40	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 17:40	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 17:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*130*		*70 - 130*	*07/20/23 15:43*	*07/27/23 17:40*	*1*
o-Terphenyl	*112*		*70 - 130*	*07/20/23 15:43*	*07/27/23 17:40*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2210**		25.0		mg/Kg			07/20/23 11:17	5

Client Sample ID: SS08

Date Collected: 07/17/23 10:45
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-9
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 18:51	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 18:51	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 18:51	1
m-Xylene & p-Xylene	<0.00399	U	0.00399		mg/Kg		07/20/23 14:04	07/22/23 18:51	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 18:51	1
Xylenes, Total	<0.00399	U	0.00399		mg/Kg		07/20/23 14:04	07/22/23 18:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*91*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:51*	*1*
1,4-Difluorobenzene (Surr)	*79*		*70 - 130*	*07/20/23 14:04*	*07/22/23 18:51*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 18:02	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 18:02	1
Oil Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		07/20/23 15:43	07/27/23 18:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*129*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:02*	*1*
o-Terphenyl	*113*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:02*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS08

Date Collected: 07/17/23 10:45
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-9

Matrix: Solid

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40.1		4.99		mg/Kg			07/20/23 11:22	1

Client Sample ID: SS09

Date Collected: 07/17/23 10:50
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-10

Matrix: Solid

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		07/20/23 14:04	07/22/23 19:11	1
Toluene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 19:11	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 19:11	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		07/20/23 14:04	07/22/23 19:11	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		07/20/23 14:04	07/22/23 19:11	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		07/20/23 14:04	07/22/23 19:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*77*		*70 - 130*	*07/20/23 14:04*	*07/22/23 19:11*	*1*
1,4-Difluorobenzene (Surr)	*77*		*70 - 130*	*07/20/23 14:04*	*07/22/23 19:11*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		07/20/23 15:43	07/27/23 18:24	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		07/20/23 15:43	07/27/23 18:24	1
Oil Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		07/20/23 15:43	07/27/23 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*125*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:24*	*1*
o-Terphenyl	*107*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:24*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.9		4.98		mg/Kg			07/20/23 11:28	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS10

Date Collected: 07/17/23 10:55
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-11
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 19:32	1
Toluene	**0.00277**		0.00199		mg/Kg		07/20/23 14:04	07/22/23 19:32	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 19:32	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 19:32	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		07/20/23 14:04	07/22/23 19:32	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		07/20/23 14:04	07/22/23 19:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*07/20/23 14:04*	*07/22/23 19:32*	*1*
1,4-Difluorobenzene (Surr)	*93*		*70 - 130*	*07/20/23 14:04*	*07/22/23 19:32*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6		mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 18:46	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 18:46	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6		mg/Kg		07/20/23 15:43	07/27/23 18:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*105*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:46*	*1*
o-Terphenyl	*99*		*70 - 130*	*07/20/23 15:43*	*07/27/23 18:46*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**50.5**		5.01		mg/Kg			07/19/23 18:43	1

Client Sample ID: SS11

Date Collected: 07/17/23 11:00
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-12
Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U F1 F2	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:37	1
Toluene	<0.00200	U F1 F2	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:37	1
Ethylbenzene	<0.00200	U F1 F2	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:37	1
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.00399		mg/Kg		07/20/23 14:20	07/22/23 22:37	1
o-Xylene	<0.00200	U F1 F2	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:37	1
Xylenes, Total	<0.00399	U F1 F2	0.00399		mg/Kg		07/20/23 14:20	07/22/23 22:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*80*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:37*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS11

Date Collected: 07/17/23 11:00
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-12

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:37*	*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			07/24/23 09:30	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.6	U	49.6	mg/Kg			07/28/23 11:50	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 19:07	1
Diesel Range Organics (Over C10-C28)	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 19:07	1
Oil Range Organics (Over C28-C36)	<49.6	U	49.6	mg/Kg		07/20/23 15:43	07/27/23 19:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*111*		*70 - 130*	*07/20/23 15:43*	*07/27/23 19:07*	*1*
o-Terphenyl	*95*		*70 - 130*	*07/20/23 15:43*	*07/27/23 19:07*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**29.7**		4.99	mg/Kg			07/19/23 18:48	1

Client Sample ID: SS12

Date Collected: 07/17/23 13:00
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-13

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		07/20/23 14:20	07/22/23 22:57	1
Toluene	<0.00201	U	0.00201	mg/Kg		07/20/23 14:20	07/22/23 22:57	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		07/20/23 14:20	07/22/23 22:57	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		07/20/23 14:20	07/22/23 22:57	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		07/20/23 14:20	07/22/23 22:57	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		07/20/23 14:20	07/22/23 22:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:57*	*1*
1,4-Difluorobenzene (Surr)	*81*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:57*	*1*

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			07/24/23 09:30	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			07/28/23 11:50	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS12

Date Collected: 07/17/23 13:00
Date Received: 07/17/23 16:11
Sample Depth: 0.5

Lab Sample ID: 890-4956-13

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		07/20/23 15:43	07/27/23 19:29	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0		mg/Kg		07/20/23 15:43	07/27/23 19:29	1
Oil Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		07/20/23 15:43	07/27/23 19:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*108*		*70 - 130*	*07/20/23 15:43*	*07/27/23 19:29*	*1*
o-Terphenyl	*91*		*70 - 130*	*07/20/23 15:43*	*07/27/23 19:29*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**26.2**		4.99		mg/Kg			07/19/23 18:53	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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)
890-4956-1	SS01	92	77
890-4956-2	SS01A	78	92
890-4956-3	SS07	75	86
890-4956-4	SS03	89	74
890-4956-5	SS04	94	75
890-4956-6	SS05	89	70
890-4956-7	SS06	90	72
890-4956-8	SS02	95	80
890-4956-9	SS08	91	79
890-4956-10	SS09	77	77
890-4956-11	SS10	81	93
890-4956-12	SS11	80	94
890-4956-12 MS	SS11	105	109
890-4956-12 MSD	SS11	67 S1-	102
890-4956-13	SS12	82	81
LCS 880-58152/1-A	Lab Control Sample	113	104
LCS 880-58153/1-A	Lab Control Sample	107	103
LCSD 880-58152/2-A	Lab Control Sample Dup	111	105
LCSD 880-58153/2-A	Lab Control Sample Dup	114	107
MB 880-58152/5-A	Method Blank	72	87
MB 880-58153/5-A	Method Blank	73	89

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)
890-4929-A-1-D MS	Matrix Spike	147 S1+	119
890-4929-A-1-E MSD	Matrix Spike Duplicate	144 S1+	112
890-4956-1	SS01	130	114
890-4956-2	SS01A	131 S1+	117
890-4956-3	SS07	126	111
890-4956-4	SS03	122	103
890-4956-5	SS04	118	101
890-4956-6	SS05	120	102
890-4956-7	SS06	130	113
890-4956-8	SS02	130	112
890-4956-9	SS08	129	113
890-4956-10	SS09	125	107
890-4956-11	SS10	105	99
890-4956-12	SS11	111	95
890-4956-13	SS12	108	91
LCS 880-58169/2-A	Lab Control Sample	112	105
LCSD 880-58169/3-A	Lab Control Sample Dup	102	92
MB 880-58169/1-A	Method Blank	162 S1+	150 S1+

Surrogate Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-58152/5-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58152

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 11:37	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 11:37	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 11:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 14:04	07/22/23 11:37	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:04	07/22/23 11:37	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 14:04	07/22/23 11:37	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*72*		*70 - 130*	*07/20/23 14:04*	*07/22/23 11:37*	*1*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*	*07/20/23 14:04*	*07/22/23 11:37*	*1*

Lab Sample ID: LCS 880-58152/1-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58152

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1155		mg/Kg		116	70 - 130		
Toluene			0.100	0.1017		mg/Kg		102	70 - 130		
Ethylbenzene			0.100	0.1131		mg/Kg		113	70 - 130		
m-Xylene & p-Xylene			0.200	0.2400		mg/Kg		120	70 - 130		
o-Xylene			0.100	0.1176		mg/Kg		118	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*70 - 130*
1,4-Difluorobenzene (Surr)	*104*		*70 - 130*

Lab Sample ID: LCSD 880-58152/2-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58152

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1134		mg/Kg		113	70 - 130	2	35
Toluene			0.100	0.09565		mg/Kg		96	70 - 130	6	35
Ethylbenzene			0.100	0.1082		mg/Kg		108	70 - 130	4	35
m-Xylene & p-Xylene			0.200	0.2268		mg/Kg		113	70 - 130	6	35
o-Xylene			0.100	0.1115		mg/Kg		111	70 - 130	5	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*111*		*70 - 130*
1,4-Difluorobenzene (Surr)	*105*		*70 - 130*

Lab Sample ID: MB 880-58153/5-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58153

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:15	1

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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

Lab Sample ID: MB 880-58153/5-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58153

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		07/20/23 14:20	07/22/23 22:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		07/20/23 14:20	07/22/23 22:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		07/20/23 14:20	07/22/23 22:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*73*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:15*	*1*
1,4-Difluorobenzene (Surr)	*89*		*70 - 130*	*07/20/23 14:20*	*07/22/23 22:15*	*1*

Lab Sample ID: LCS 880-58153/1-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58153

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.1275		mg/Kg		127	70 - 130		
Toluene			0.100	0.1089		mg/Kg		109	70 - 130		
Ethylbenzene			0.100	0.1194		mg/Kg		119	70 - 130		
m-Xylene & p-Xylene			0.200	0.2473		mg/Kg		124	70 - 130		
o-Xylene			0.100	0.1220		mg/Kg		122	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*107*		*70 - 130*
1,4-Difluorobenzene (Surr)	*103*		*70 - 130*

Lab Sample ID: LCSD 880-58153/2-A
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58153

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.1125		mg/Kg		113	70 - 130	12	35
Toluene			0.100	0.09756		mg/Kg		98	70 - 130	11	35
Ethylbenzene			0.100	0.1099		mg/Kg		110	70 - 130	8	35
m-Xylene & p-Xylene			0.200	0.2298		mg/Kg		115	70 - 130	7	35
o-Xylene			0.100	0.1139		mg/Kg		114	70 - 130	7	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*70 - 130*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*

Lab Sample ID: 890-4956-12 MS
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: SS11
Prep Type: Total/NA
Prep Batch: 58153

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene	<0.00200	U F1 F2	0.0994	0.1079		mg/Kg		109	70 - 130		
Toluene	<0.00200	U F1 F2	0.0994	0.08779		mg/Kg		87	70 - 130		
Ethylbenzene	<0.00200	U F1 F2	0.0994	0.09645		mg/Kg		97	70 - 130		
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.199	0.1954		mg/Kg		98	70 - 130		

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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

Lab Sample ID: 890-4956-12 MS
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: SS11
Prep Type: Total/NA
Prep Batch: 58153

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
o-Xylene	<0.00200	U F1 F2	0.0994	0.09653		mg/Kg		97	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*105*		*70 - 130*
1,4-Difluorobenzene (Surr)	*109*		*70 - 130*

Lab Sample ID: 890-4956-12 MSD
Matrix: Solid
Analysis Batch: 58267

Client Sample ID: SS11
Prep Type: Total/NA
Prep Batch: 58153

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00200	U F1 F2	0.0998	0.05218	F1 F2	mg/Kg		52	70 - 130	70	35
Toluene	<0.00200	U F1 F2	0.0998	0.04482	F1 F2	mg/Kg		44	70 - 130	65	35
Ethylbenzene	<0.00200	U F1 F2	0.0998	0.04466	F1 F2	mg/Kg		45	70 - 130	73	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.200	0.08105	F1 F2	mg/Kg		40	70 - 130	83	35
o-Xylene	<0.00200	U F1 F2	0.0998	0.04170	F1 F2	mg/Kg		41	70 - 130	79	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*67*	*S1-*	*70 - 130*
1,4-Difluorobenzene (Surr)	*102*		*70 - 130*

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

Lab Sample ID: MB 880-58169/1-A
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 58169

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 08:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 08:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		07/20/23 15:43	07/27/23 08:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*162*	*S1+*	*70 - 130*	*07/20/23 15:43*	*07/27/23 08:53*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*07/20/23 15:43*	*07/27/23 08:53*	*1*

Lab Sample ID: LCS 880-58169/2-A
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58169

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	1000	1008		mg/Kg		101	70 - 130
Diesel Range Organics (Over C10-C28)	1000	1021		mg/Kg		102	70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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

Lab Sample ID: LCS 880-58169/2-A
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 58169

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1-Chlorooctane	112		70 - 130
o-Terphenyl	105		70 - 130

Lab Sample ID: LCSD 880-58169/3-A
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 58169

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	957.9		mg/Kg		96	70 - 130	5	20
Diesel Range Organics (Over C10-C28)			1000	964.6		mg/Kg		96	70 - 130	6	20

Surrogate	LCSD %Recovery	LCSD Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	92		70 - 130

Lab Sample ID: 890-4929-A-1-D MS
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 58169

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F1	996	1476	F1	mg/Kg		147	70 - 130
Diesel Range Organics (Over C10-C28)	<50.1	U F1	996	1447	F1	mg/Kg		143	70 - 130

Surrogate	MS %Recovery	MS Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: 890-4929-A-1-E MSD
Matrix: Solid
Analysis Batch: 58603

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 58169

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.1	U F1	996	1442	F1	mg/Kg		143	70 - 130	2	20
Diesel Range Organics (Over C10-C28)	<50.1	U F1	996	1395	F1	mg/Kg		138	70 - 130	4	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1-Chlorooctane	144	S1+	70 - 130
o-Terphenyl	112		70 - 130

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-58027/1-A
Matrix: Solid
Analysis Batch: 58062

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/19/23 16:29	1

Lab Sample ID: LCS 880-58027/2-A
Matrix: Solid
Analysis Batch: 58062

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	240.6		mg/Kg		96	90 - 110		

Lab Sample ID: LCSD 880-58027/3-A
Matrix: Solid
Analysis Batch: 58062

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	240.4		mg/Kg		96	90 - 110	0	20

Lab Sample ID: 880-30939-A-9-B MS
Matrix: Solid
Analysis Batch: 58062

Client Sample ID: Matrix Spike
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	11900		4970	16760		mg/Kg		98	90 - 110		

Lab Sample ID: 880-30939-A-9-C MSD
Matrix: Solid
Analysis Batch: 58062

Client Sample ID: Matrix Spike Duplicate
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	11900		4970	16790		mg/Kg		99	90 - 110	0	20

Lab Sample ID: MB 880-58012/1-A
Matrix: Solid
Analysis Batch: 58102

Client Sample ID: Method Blank
Prep Type: Soluble

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00		mg/Kg			07/20/23 08:34	1

Lab Sample ID: LCS 880-58012/2-A
Matrix: Solid
Analysis Batch: 58102

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	232.9		mg/Kg		93	90 - 110		

Lab Sample ID: LCSD 880-58012/3-A
Matrix: Solid
Analysis Batch: 58102

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	232.9		mg/Kg		93	90 - 110	0	20

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: 890-4956-1 MS
Matrix: Solid
Analysis Batch: 58102

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	71.7		249	299.5		mg/Kg		92	90 - 110		

Lab Sample ID: 890-4956-1 MSD
Matrix: Solid
Analysis Batch: 58102

Client Sample ID: SS01
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	71.7		249	299.8		mg/Kg		92	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

GC VOA

Prep Batch: 58152

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	5035	
890-4956-2	SS01A	Total/NA	Solid	5035	
890-4956-3	SS07	Total/NA	Solid	5035	
890-4956-4	SS03	Total/NA	Solid	5035	
890-4956-5	SS04	Total/NA	Solid	5035	
890-4956-6	SS05	Total/NA	Solid	5035	
890-4956-7	SS06	Total/NA	Solid	5035	
890-4956-8	SS02	Total/NA	Solid	5035	
890-4956-9	SS08	Total/NA	Solid	5035	
890-4956-10	SS09	Total/NA	Solid	5035	
890-4956-11	SS10	Total/NA	Solid	5035	
MB 880-58152/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58152/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58152/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 58153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-12	SS11	Total/NA	Solid	5035	
890-4956-13	SS12	Total/NA	Solid	5035	
MB 880-58153/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-58153/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-58153/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-4956-12 MS	SS11	Total/NA	Solid	5035	
890-4956-12 MSD	SS11	Total/NA	Solid	5035	

Analysis Batch: 58267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	8021B	58152
890-4956-2	SS01A	Total/NA	Solid	8021B	58152
890-4956-3	SS07	Total/NA	Solid	8021B	58152
890-4956-4	SS03	Total/NA	Solid	8021B	58152
890-4956-5	SS04	Total/NA	Solid	8021B	58152
890-4956-6	SS05	Total/NA	Solid	8021B	58152
890-4956-7	SS06	Total/NA	Solid	8021B	58152
890-4956-8	SS02	Total/NA	Solid	8021B	58152
890-4956-9	SS08	Total/NA	Solid	8021B	58152
890-4956-10	SS09	Total/NA	Solid	8021B	58152
890-4956-11	SS10	Total/NA	Solid	8021B	58152
890-4956-12	SS11	Total/NA	Solid	8021B	58153
890-4956-13	SS12	Total/NA	Solid	8021B	58153
MB 880-58152/5-A	Method Blank	Total/NA	Solid	8021B	58152
MB 880-58153/5-A	Method Blank	Total/NA	Solid	8021B	58153
LCS 880-58152/1-A	Lab Control Sample	Total/NA	Solid	8021B	58152
LCS 880-58153/1-A	Lab Control Sample	Total/NA	Solid	8021B	58153
LCSD 880-58152/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58152
LCSD 880-58153/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	58153
890-4956-12 MS	SS11	Total/NA	Solid	8021B	58153
890-4956-12 MSD	SS11	Total/NA	Solid	8021B	58153

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

GC VOA

Analysis Batch: 58326

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	Total BTEX	
890-4956-2	SS01A	Total/NA	Solid	Total BTEX	
890-4956-3	SS07	Total/NA	Solid	Total BTEX	
890-4956-4	SS03	Total/NA	Solid	Total BTEX	
890-4956-5	SS04	Total/NA	Solid	Total BTEX	
890-4956-6	SS05	Total/NA	Solid	Total BTEX	
890-4956-7	SS06	Total/NA	Solid	Total BTEX	
890-4956-8	SS02	Total/NA	Solid	Total BTEX	
890-4956-9	SS08	Total/NA	Solid	Total BTEX	
890-4956-10	SS09	Total/NA	Solid	Total BTEX	
890-4956-11	SS10	Total/NA	Solid	Total BTEX	
890-4956-12	SS11	Total/NA	Solid	Total BTEX	
890-4956-13	SS12	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 58169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	8015NM Prep	
890-4956-2	SS01A	Total/NA	Solid	8015NM Prep	
890-4956-3	SS07	Total/NA	Solid	8015NM Prep	
890-4956-4	SS03	Total/NA	Solid	8015NM Prep	
890-4956-5	SS04	Total/NA	Solid	8015NM Prep	
890-4956-6	SS05	Total/NA	Solid	8015NM Prep	
890-4956-7	SS06	Total/NA	Solid	8015NM Prep	
890-4956-8	SS02	Total/NA	Solid	8015NM Prep	
890-4956-9	SS08	Total/NA	Solid	8015NM Prep	
890-4956-10	SS09	Total/NA	Solid	8015NM Prep	
890-4956-11	SS10	Total/NA	Solid	8015NM Prep	
890-4956-12	SS11	Total/NA	Solid	8015NM Prep	
890-4956-13	SS12	Total/NA	Solid	8015NM Prep	
MB 880-58169/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-58169/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-58169/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-4929-A-1-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-4929-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 58603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	8015B NM	58169
890-4956-2	SS01A	Total/NA	Solid	8015B NM	58169
890-4956-3	SS07	Total/NA	Solid	8015B NM	58169
890-4956-4	SS03	Total/NA	Solid	8015B NM	58169
890-4956-5	SS04	Total/NA	Solid	8015B NM	58169
890-4956-6	SS05	Total/NA	Solid	8015B NM	58169
890-4956-7	SS06	Total/NA	Solid	8015B NM	58169
890-4956-8	SS02	Total/NA	Solid	8015B NM	58169
890-4956-9	SS08	Total/NA	Solid	8015B NM	58169
890-4956-10	SS09	Total/NA	Solid	8015B NM	58169
890-4956-11	SS10	Total/NA	Solid	8015B NM	58169
890-4956-12	SS11	Total/NA	Solid	8015B NM	58169

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

GC Semi VOA (Continued)

Analysis Batch: 58603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-13	SS12	Total/NA	Solid	8015B NM	58169
MB 880-58169/1-A	Method Blank	Total/NA	Solid	8015B NM	58169
LCS 880-58169/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	58169
LCSD 880-58169/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	58169
890-4929-A-1-D MS	Matrix Spike	Total/NA	Solid	8015B NM	58169
890-4929-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	58169

Analysis Batch: 58719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Total/NA	Solid	8015 NM	
890-4956-2	SS01A	Total/NA	Solid	8015 NM	
890-4956-3	SS07	Total/NA	Solid	8015 NM	
890-4956-4	SS03	Total/NA	Solid	8015 NM	
890-4956-5	SS04	Total/NA	Solid	8015 NM	
890-4956-6	SS05	Total/NA	Solid	8015 NM	
890-4956-7	SS06	Total/NA	Solid	8015 NM	
890-4956-8	SS02	Total/NA	Solid	8015 NM	
890-4956-9	SS08	Total/NA	Solid	8015 NM	
890-4956-10	SS09	Total/NA	Solid	8015 NM	
890-4956-11	SS10	Total/NA	Solid	8015 NM	
890-4956-12	SS11	Total/NA	Solid	8015 NM	
890-4956-13	SS12	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 58012

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Soluble	Solid	DI Leach	
890-4956-2	SS01A	Soluble	Solid	DI Leach	
890-4956-3	SS07	Soluble	Solid	DI Leach	
890-4956-4	SS03	Soluble	Solid	DI Leach	
890-4956-5	SS04	Soluble	Solid	DI Leach	
890-4956-6	SS05	Soluble	Solid	DI Leach	
890-4956-7	SS06	Soluble	Solid	DI Leach	
890-4956-8	SS02	Soluble	Solid	DI Leach	
890-4956-9	SS08	Soluble	Solid	DI Leach	
890-4956-10	SS09	Soluble	Solid	DI Leach	
MB 880-58012/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-58012/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-58012/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-4956-1 MS	SS01	Soluble	Solid	DI Leach	
890-4956-1 MSD	SS01	Soluble	Solid	DI Leach	

Leach Batch: 58027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-11	SS10	Soluble	Solid	DI Leach	
890-4956-12	SS11	Soluble	Solid	DI Leach	
890-4956-13	SS12	Soluble	Solid	DI Leach	
MB 880-58027/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-58027/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-58027/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

HPLC/IC (Continued)

Leach Batch: 58027 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-30939-A-9-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-30939-A-9-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 58062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-11	SS10	Soluble	Solid	300.0	58027
890-4956-12	SS11	Soluble	Solid	300.0	58027
890-4956-13	SS12	Soluble	Solid	300.0	58027
MB 880-58027/1-A	Method Blank	Soluble	Solid	300.0	58027
LCS 880-58027/2-A	Lab Control Sample	Soluble	Solid	300.0	58027
LCSD 880-58027/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	58027
880-30939-A-9-B MS	Matrix Spike	Soluble	Solid	300.0	58027
880-30939-A-9-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	58027

Analysis Batch: 58102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-4956-1	SS01	Soluble	Solid	300.0	58012
890-4956-2	SS01A	Soluble	Solid	300.0	58012
890-4956-3	SS07	Soluble	Solid	300.0	58012
890-4956-4	SS03	Soluble	Solid	300.0	58012
890-4956-5	SS04	Soluble	Solid	300.0	58012
890-4956-6	SS05	Soluble	Solid	300.0	58012
890-4956-7	SS06	Soluble	Solid	300.0	58012
890-4956-8	SS02	Soluble	Solid	300.0	58012
890-4956-9	SS08	Soluble	Solid	300.0	58012
890-4956-10	SS09	Soluble	Solid	300.0	58012
MB 880-58012/1-A	Method Blank	Soluble	Solid	300.0	58012
LCS 880-58012/2-A	Lab Control Sample	Soluble	Solid	300.0	58012
LCSD 880-58012/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	58012
890-4956-1 MS	SS01	Soluble	Solid	300.0	58012
890-4956-1 MSD	SS01	Soluble	Solid	300.0	58012

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS01
Date Collected: 07/17/23 10:00
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 12:40	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 14:45	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 10:01	CH	EET MID

Client Sample ID: SS01A
Date Collected: 07/17/23 10:05
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 16:27	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 15:07	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 10:16	CH	EET MID

Client Sample ID: SS07
Date Collected: 07/17/23 09:20
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 16:48	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.91 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 15:29	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 10:22	CH	EET MID

Client Sample ID: SS03
Date Collected: 07/17/23 09:25
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 17:08	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS03
Date Collected: 07/17/23 09:25
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.96 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 16:13	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		5			58102	07/20/23 10:57	CH	EET MID

Client Sample ID: SS04
Date Collected: 07/17/23 09:30
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 17:29	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 16:34	AJ	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 11:02	CH	EET MID

Client Sample ID: SS05
Date Collected: 07/17/23 09:35
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-6
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 17:49	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 16:56	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		5			58102	07/20/23 11:07	CH	EET MID

Client Sample ID: SS06
Date Collected: 07/17/23 09:40
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 18:10	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 17:18	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS06
Date Collected: 07/17/23 09:40
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-7
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.99 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		5			58102	07/20/23 11:12	CH	EET MID

Client Sample ID: SS02
Date Collected: 07/17/23 10:40
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-8
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 18:30	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.93 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 17:40	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		5			58102	07/20/23 11:17	CH	EET MID

Client Sample ID: SS08
Date Collected: 07/17/23 10:45
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-9
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 18:51	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 18:02	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 11:22	CH	EET MID

Client Sample ID: SS09
Date Collected: 07/17/23 10:50
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-10
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 19:11	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 18:24	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	58012	07/19/23 10:11	KS	EET MID
Soluble	Analysis	300.0		1			58102	07/20/23 11:28	CH	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Client Sample ID: SS10
Date Collected: 07/17/23 10:55
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-11
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	58152	07/20/23 14:04	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 19:32	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.08 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 18:46	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	58027	07/19/23 11:26	KS	EET MID
Soluble	Analysis	300.0		1			58062	07/19/23 18:43	CH	EET MID

Client Sample ID: SS11
Date Collected: 07/17/23 11:00
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-12
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	58153	07/20/23 14:20	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 22:37	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.09 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 19:07	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58027	07/19/23 11:26	KS	EET MID
Soluble	Analysis	300.0		1			58062	07/19/23 18:48	CH	EET MID

Client Sample ID: SS12
Date Collected: 07/17/23 13:00
Date Received: 07/17/23 16:11

Lab Sample ID: 890-4956-13
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	58153	07/20/23 14:20	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	58267	07/22/23 22:57	SM	EET MID
Total/NA	Analysis	Total BTEX		1			58326	07/24/23 09:30	SM	EET MID
Total/NA	Analysis	8015 NM		1			58719	07/28/23 11:50	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	58169	07/20/23 15:43	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	58603	07/27/23 19:29	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	58027	07/19/23 11:26	KS	EET MID
Soluble	Analysis	300.0		1			58062	07/19/23 18:53	CH	EET MID

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

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

Method Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-4956-1
SDG: 03C1558251

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-4956-1	SS01	Solid	07/17/23 10:00	07/17/23 16:11	12
890-4956-2	SS01A	Solid	07/17/23 10:05	07/17/23 16:11	13
890-4956-3	SS07	Solid	07/17/23 09:20	07/17/23 16:11	0.5
890-4956-4	SS03	Solid	07/17/23 09:25	07/17/23 16:11	0.5
890-4956-5	SS04	Solid	07/17/23 09:30	07/17/23 16:11	0.5
890-4956-6	SS05	Solid	07/17/23 09:35	07/17/23 16:11	0.5
890-4956-7	SS06	Solid	07/17/23 09:40	07/17/23 16:11	0.5
890-4956-8	SS02	Solid	07/17/23 10:40	07/17/23 16:11	0.5
890-4956-9	SS08	Solid	07/17/23 10:45	07/17/23 16:11	0.5
890-4956-10	SS09	Solid	07/17/23 10:50	07/17/23 16:11	0.5
890-4956-11	SS10	Solid	07/17/23 10:55	07/17/23 16:11	0.5
890-4956-12	SS11	Solid	07/17/23 11:00	07/17/23 16:11	0.5
890-4956-13	SS12	Solid	07/17/23 13:00	07/17/23 16:11	0.5

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Chain of Custody

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

Work Order No: _____

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Project Manager:	Ben Belill	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	3104 E Greene St
Address:	3122 National Parks Hwy	Address:	Carlsbad, NM 88220
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	XTO Energy
Phone:	989-854-0852	Email:	Garrett.Green@ExxonMobil.com

Work Order Comments

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

Project Name:	PLU C-1 Recycle Facility	Turn Around	
Project Number:	03C1558251	☒ Routine ☐ Rush	
Project Location:	32.213561, -103.80040	Due Date:	5 days
Sampler's Name:	Mariana O'Dell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	3.2
Total Containers:		Corrected Temperature:	3.0

ANALYSIS REQUEST

Pres. Code

Parameters: Chlorides, BTEX, TPH

890-4956 Chain of Custody

Preservative Codes

None: NO | DI Water: H_2O
Cool: Cool | MeOH: Me
HCL: HC | HNO_3: HN
H_2SO_4: H_2 | NaOH: Na
H_3PO_4: HP
$NaHSO_4$: NABIS
$Na_2S_2O_3$: NaSO$_3$
Zn Acetate+NaOH: Zn
NaOH+Ascorbic Acid: SAPC

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Chlorides	BTEX	TPH	Sample Comments
SS01	S	7/17/23	10:00	12'	G	1	X	X	X	Incident #:
SS01A			10:05	13'						nAPP2316047404
SS02			9:20	0.5'						
SS03			9:25							Ben Belill
SS04			9:30							bbelill@ensolum.com
SS05			9:35							
SS06			9:40							
SS07			10:40							
SS08			10:45							
SS09			10:50							

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

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7.17.23 1611	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 2 of 2

Project Manager:	Ben Belill	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852 Email:	Email:	Garrett.Green@ExxonMobil.com

Work Order Comments

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

Project Name:	PLU C-1 Recycle Facility	Turn Around	
Project Number:	03C1558251	☒ Routine ☐ Rush	
Project Location:	32.21356, -103.86040	Due Date:	5 days
Sampler's Name:	Mariana O'Dell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

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

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Pres. Code	Parameters: Chlorides	TPH	BTEX
SS10	S	7/17/23	10:55	0.5'	G	1		X	X	X
SS11	↓	↓	11:00	↓	↓	↓		↓	↓	↓
SS12	↓	↓	13:00	↓	↓	↓		↓	↓	↓

Preservative Codes

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

Sample Comments

Incident #:
nAPP2316047464

Ben Belill:
bbelill@ensolum.com

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

Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1		7.17.23 1611	2		
3			4		
5			6		

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s):	COC No: 890-1375 1
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-4956-1
Address: 1211 W Florida Ave	Due Date Requested: 7/21/2023			
City: Midland	TAT Requested (days):			
State Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU C-1 RECYCLE FACILITY	Project #: 89000093			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS01 (890-4956-1)	7/17/23	10 00 Mountain		Solid			X	X	X	X	X	1	
SS01A (890-4956-2)	7/17/23	10 05 Mountain		Solid			X	X	X	X	X	1	
SS02 (890-4956-3)	7/17/23	09 20 Mountain		Solid			X	X	X	X	X	1	
SS03 (890-4956-4)	7/17/23	09 25 Mountain		Solid			X	X	X	X	X	1	
SS04 (890-4956-5)	7/17/23	09 30 Mountain		Solid			X	X	X	X	X	1	
SS05 (890-4956-6)	7/17/23	09 35 Mountain		Solid			X	X	X	X	X	1	
SS06 (890-4956-7)	7/17/23	09 40 Mountain		Solid			X	X	X	X	X	1	
SS07 (890-4956-8)	7/17/23	10 40 Mountain		Solid			X	X	X	X	X	1	
SS08 (890-4956-9)	7/17/23	10 45 Mountain		Solid			X	X	X	X	X	1	

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

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

Empty Kit Relinquished by	Date	Time	Method of Shipment

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

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

Ver: 06/08/2021

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

Chain of Custody Record

eurofins | Environment Testing

Client Information (Sub Contract Lab)	Sampler	Lab PM: Kramer, Jessica	Carrier Tracking No(s)	COC No: 890-1375 2
Client Contact: Shipping/Receiving	Phone	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 2 of 2
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-4956-1
Address: 1211 W Florida Ave	Due Date Requested: 7/21/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email	WO #:			
Project Name: PLU C-1 RECYCLE FACILITY	Project #: 89000093			
Site:	SSOW#:			

Analysis Requested

Preservation Codes

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
			Preservation Code:										
SS09 (890-4956-10)	7/17/23	10 50 Mountain		Solid			X	X	X	X	X	1	
SS10 (890-4956-11)	7/17/23	10 55 Mountain		Solid			X	X	X	X	X	1	
SS11 (890-4956-12)	7/17/23	11 00 Mountain		Solid			X	X	X	X	X	1	
SS12 (890-4956-13)	7/17/23	13 00 Mountain		Solid			X	X	X	X	X	1	

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

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

Empty Kit Relinquished by:	Date	Time	Method of Shipment:

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

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-4956-1
SDG Number: 03C1558251

Login Number: 4956
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: 890-4956-1
SDG Number: 03C1558251

Login Number: 4956
List Number: 2
Creator: Teel, Brianna

List Source: Eurofins Midland
List Creation: 07/19/23 12:08 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").	True	

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ANALYTICAL REPORT

PREPARED FOR

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

Generated 8/23/2023 11:49:56 AM

JOB DESCRIPTION

PLU C-1 RECYCLE FACILITY
SDG NUMBER 03C1558251

JOB NUMBER

890-5076-1

Eurofins Carlsbad
1089 N Canal St.
Carlsbad NM 88220

See page two for job notes and contact information.

my EOL

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
8/23/2023 11:49:56 AM

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

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Laboratory Job ID: 890-5076-1
SDG: 03C1558251

Table of Contents

Definitions/Glossary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Qualifiers

GC VOA

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

Case Narrative

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Job ID: 890-5076-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative
890-5076-1

Receipt
The samples were received on 8/10/2023 2:28 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 4.0°C

Receipt Exceptions
The following samples were received and analyzed from an unpreserved bulk soil jar: BH02 (890-5076-1), BH03 (890-5076-2), BH04 (890-5076-3), BH05 (890-5076-4) and BH06 (890-5076-5).

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: BH02 (890-5076-1), BH03 (890-5076-2), BH04 (890-5076-3), BH05 (890-5076-4), BH06 (890-5076-5), (880-31900-A-14-E), (880-31900-A-14-F MS) and (880-31900-A-14-G MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-60605 and analytical batch 880-60637 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (CCV 880-60637/20), (CCV 880-60637/31) and (CCV 880-60637/5). Evidence of matrix interferences is not obvious.

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

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

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH02

Lab Sample ID: 890-5076-1
Matrix: Solid
Date Collected: 08/10/23 08:55
Date Received: 08/10/23 14:28
Sample Depth: 1

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		08/22/23 13:09	08/23/23 04:44	1
Toluene	<0.00202	U	0.00202		mg/Kg		08/22/23 13:09	08/23/23 04:44	1
Ethylbenzene	<0.00202	U	0.00202		mg/Kg		08/22/23 13:09	08/23/23 04:44	1
m-Xylene & p-Xylene	<0.00403	U	0.00403		mg/Kg		08/22/23 13:09	08/23/23 04:44	1
o-Xylene	<0.00202	U	0.00202		mg/Kg		08/22/23 13:09	08/23/23 04:44	1
Xylenes, Total	<0.00403	U	0.00403		mg/Kg		08/22/23 13:09	08/23/23 04:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*08/22/23 13:09*	*08/23/23 04:44*	*1*
1,4-Difluorobenzene (Surr)	*88*		*70 - 130*	*08/22/23 13:09*	*08/23/23 04:44*	*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			08/23/23 12:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9		mg/Kg			08/22/23 14:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9		mg/Kg		08/18/23 18:17	08/21/23 17:04	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9		mg/Kg		08/18/23 18:17	08/21/23 17:04	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9		mg/Kg		08/18/23 18:17	08/21/23 17:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:04*	*1*
o-Terphenyl	*150*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:04*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**307**		5.01		mg/Kg			08/15/23 01:39	1

Client Sample ID: BH03

Lab Sample ID: 890-5076-2
Matrix: Solid
Date Collected: 08/10/23 10:25
Date Received: 08/10/23 14:28
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		08/22/23 13:09	08/23/23 05:04	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 05:04	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 05:04	1
m-Xylene & p-Xylene	<0.00401	U	0.00401		mg/Kg		08/22/23 13:09	08/23/23 05:04	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 05:04	1
Xylenes, Total	<0.00401	U	0.00401		mg/Kg		08/22/23 13:09	08/23/23 05:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*81*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:04*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH03

Date Collected: 08/10/23 10:25
Date Received: 08/10/23 14:28
Sample Depth: 4

Lab Sample ID: 890-5076-2

Matrix: Solid

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Difluorobenzene (Surr)	*90*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:04*	*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			08/23/23 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.7	U	49.7	mg/Kg			08/22/23 14:01	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.7	U	49.7	mg/Kg		08/18/23 18:17	08/21/23 17:26	1
Diesel Range Organics (Over C10-C28)	<49.7	U	49.7	mg/Kg		08/18/23 18:17	08/21/23 17:26	1
OII Range Organics (Over C28-C36)	<49.7	U	49.7	mg/Kg		08/18/23 18:17	08/21/23 17:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*141*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:26*	*1*
o-Terphenyl	*155*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:26*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1340**		4.97	mg/Kg			08/15/23 02:00	1

Client Sample ID: BH04

Date Collected: 08/10/23 10:50
Date Received: 08/10/23 14:28
Sample Depth: 3

Lab Sample ID: 890-5076-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		08/22/23 13:09	08/23/23 05:24	1
Toluene	<0.00201	U	0.00201	mg/Kg		08/22/23 13:09	08/23/23 05:24	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		08/22/23 13:09	08/23/23 05:24	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		08/22/23 13:09	08/23/23 05:24	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		08/22/23 13:09	08/23/23 05:24	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		08/22/23 13:09	08/23/23 05:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:24*	*1*
1,4-Difluorobenzene (Surr)	*97*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:24*	*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			08/23/23 12:26	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.3	U	50.3	mg/Kg			08/22/23 14:01	1

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH04

Date Collected: 08/10/23 10:50
Date Received: 08/10/23 14:28
Sample Depth: 3

Lab Sample ID: 890-5076-3

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	50.3		mg/Kg		08/18/23 18:17	08/21/23 17:48	1
Diesel Range Organics (Over C10-C28)	<50.3	U	50.3		mg/Kg		08/18/23 18:17	08/21/23 17:48	1
OII Range Organics (Over C28-C36)	<50.3	U	50.3		mg/Kg		08/18/23 18:17	08/21/23 17:48	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*148*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:48*	*1*
o-Terphenyl	*159*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 17:48*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**182**		4.98		mg/Kg			08/15/23 02:07	1

Client Sample ID: BH05

Date Collected: 08/10/23 11:20
Date Received: 08/10/23 14:28
Sample Depth: 3

Lab Sample ID: 890-5076-4

Matrix: Solid

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199		mg/Kg		08/22/23 13:09	08/23/23 05:45	1
Toluene	<0.00199	U	0.00199		mg/Kg		08/22/23 13:09	08/23/23 05:45	1
Ethylbenzene	<0.00199	U	0.00199		mg/Kg		08/22/23 13:09	08/23/23 05:45	1
m-Xylene & p-Xylene	<0.00398	U	0.00398		mg/Kg		08/22/23 13:09	08/23/23 05:45	1
o-Xylene	<0.00199	U	0.00199		mg/Kg		08/22/23 13:09	08/23/23 05:45	1
Xylenes, Total	<0.00398	U	0.00398		mg/Kg		08/22/23 13:09	08/23/23 05:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:45*	*1*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*	*08/22/23 13:09*	*08/23/23 05:45*	*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			08/23/23 12:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.1	U	50.1		mg/Kg			08/22/23 14:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.1	U	50.1		mg/Kg		08/18/23 18:17	08/21/23 18:10	1
Diesel Range Organics (Over C10-C28)	<50.1	U	50.1		mg/Kg		08/18/23 18:17	08/21/23 18:10	1
OII Range Organics (Over C28-C36)	<50.1	U	50.1		mg/Kg		08/18/23 18:17	08/21/23 18:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*142*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 18:10*	*1*
o-Terphenyl	*149*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 18:10*	*1*

Client Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH05

Lab Sample ID: 890-5076-4
Matrix: Solid
Date Collected: 08/10/23 11:20
Date Received: 08/10/23 14:28
Sample Depth: 3

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	101		4.98		mg/Kg			08/15/23 02:14	1

Client Sample ID: BH06

Lab Sample ID: 890-5076-5
Matrix: Solid
Date Collected: 08/10/23 11:50
Date Received: 08/10/23 14:28
Sample Depth: 3

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		08/22/23 13:09	08/23/23 06:05	1
Toluene	<0.00198	U	0.00198		mg/Kg		08/22/23 13:09	08/23/23 06:05	1
Ethylbenzene	<0.00198	U	0.00198		mg/Kg		08/22/23 13:09	08/23/23 06:05	1
m-Xylene & p-Xylene	<0.00396	U	0.00396		mg/Kg		08/22/23 13:09	08/23/23 06:05	1
o-Xylene	<0.00198	U	0.00198		mg/Kg		08/22/23 13:09	08/23/23 06:05	1
Xylenes, Total	<0.00396	U	0.00396		mg/Kg		08/22/23 13:09	08/23/23 06:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*	*08/22/23 13:09*	*08/23/23 06:05*	*1*
1,4-Difluorobenzene (Surr)	*94*		*70 - 130*	*08/22/23 13:09*	*08/23/23 06:05*	*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			08/23/23 12:26	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.4	U	50.4		mg/Kg			08/22/23 14:01	1

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

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.4	U	50.4		mg/Kg		08/18/23 18:17	08/21/23 18:31	1
Diesel Range Organics (Over C10-C28)	<50.4	U	50.4		mg/Kg		08/18/23 18:17	08/21/23 18:31	1
OII Range Organics (Over C28-C36)	<50.4	U	50.4		mg/Kg		08/18/23 18:17	08/21/23 18:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*136*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 18:31*	*1*
o-Terphenyl	*155*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 18:31*	*1*

Method: EPA 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	327		5.04		mg/Kg			08/15/23 02:22	1

Surrogate Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Method: 8021B - Volatile Organic Compounds (GC)

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

		Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-5076-1	BH02	88	88
890-5076-1 MS	BH02	95	87
890-5076-1 MSD	BH02	94	87
890-5076-2	BH03	81	90
890-5076-3	BH04	82	97
890-5076-4	BH05	88	95
890-5076-5	BH06	95	94
LCS 880-60818/1-A	Lab Control Sample	87	95
LCSD 880-60818/2-A	Lab Control Sample Dup	99	86
MB 880-60732/5-A	Method Blank	99	119
MB 880-60818/5-A	Method Blank	102	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DFBZ = 1,4-Difluorobenzene (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-31900-A-14-F MS	Matrix Spike	163 S1+	154 S1+
880-31900-A-14-G MSD	Matrix Spike Duplicate	157 S1+	151 S1+
890-5076-1	BH02	142 S1+	150 S1+
890-5076-2	BH03	141 S1+	155 S1+
890-5076-3	BH04	148 S1+	159 S1+
890-5076-4	BH05	142 S1+	149 S1+
890-5076-5	BH06	136 S1+	155 S1+
LCS 880-60605/2-A	Lab Control Sample	96	108
LCSD 880-60605/3-A	Lab Control Sample Dup	102	117
MB 880-60605/1-A	Method Blank	155 S1+	171 S1+

Surrogate Legend

1CO = 1-Chlorooctane
OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-60732/5-A
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60732

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/21/23 12:45	08/22/23 16:38	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/21/23 12:45	08/22/23 16:38	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/21/23 12:45	08/22/23 16:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/21/23 12:45	08/22/23 16:38	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/21/23 12:45	08/22/23 16:38	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/21/23 12:45	08/22/23 16:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*	*08/21/23 12:45*	*08/22/23 16:38*	*1*
1,4-Difluorobenzene (Surr)	*119*		*70 - 130*	*08/21/23 12:45*	*08/22/23 16:38*	*1*

Lab Sample ID: MB 880-60818/5-A
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60818

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 04:15	1
Toluene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 04:15	1
Ethylbenzene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 04:15	1
m-Xylene & p-Xylene	<0.00400	U	0.00400		mg/Kg		08/22/23 13:09	08/23/23 04:15	1
o-Xylene	<0.00200	U	0.00200		mg/Kg		08/22/23 13:09	08/23/23 04:15	1
Xylenes, Total	<0.00400	U	0.00400		mg/Kg		08/22/23 13:09	08/23/23 04:15	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*102*		*70 - 130*	*08/22/23 13:09*	*08/23/23 04:15*	*1*
1,4-Difluorobenzene (Surr)	*107*		*70 - 130*	*08/22/23 13:09*	*08/23/23 04:15*	*1*

Lab Sample ID: LCS 880-60818/1-A
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60818

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Benzene			0.100	0.09278		mg/Kg		93	70 - 130		
Toluene			0.100	0.09141		mg/Kg		91	70 - 130		
Ethylbenzene			0.100	0.09066		mg/Kg		91	70 - 130		
m-Xylene & p-Xylene			0.200	0.1692		mg/Kg		85	70 - 130		
o-Xylene			0.100	0.07807		mg/Kg		78	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*87*		*70 - 130*
1,4-Difluorobenzene (Surr)	*95*		*70 - 130*

Lab Sample ID: LCSD 880-60818/2-A
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60818

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene			0.100	0.08368		mg/Kg		84	70 - 130	10	35

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

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

Lab Sample ID: LCSD 880-60818/2-A
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60818

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Toluene			0.100	0.08323		mg/Kg		83	70 - 130	9	35
Ethylbenzene			0.100	0.07555		mg/Kg		76	70 - 130	18	35
m-Xylene & p-Xylene			0.200	0.1427		mg/Kg		71	70 - 130	17	35
o-Xylene			0.100	0.07783		mg/Kg		78	70 - 130	0	35

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*70 - 130*
1,4-Difluorobenzene (Surr)	*86*		*70 - 130*

Lab Sample ID: 890-5076-1 MS
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: BH02
Prep Type: Total/NA
Prep Batch: 60818

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	<0.00202	U	0.0996	0.09593		mg/Kg		96	70 - 130
Toluene	<0.00202	U	0.0996	0.09713		mg/Kg		98	70 - 130
Ethylbenzene	<0.00202	U	0.0996	0.09368		mg/Kg		94	70 - 130
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1845		mg/Kg		93	70 - 130
o-Xylene	<0.00202	U	0.0996	0.08567		mg/Kg		86	70 - 130

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

Lab Sample ID: 890-5076-1 MSD
Matrix: Solid
Analysis Batch: 60782

Client Sample ID: BH02
Prep Type: Total/NA
Prep Batch: 60818

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Benzene	<0.00202	U	0.0994	0.09673		mg/Kg		97	70 - 130	1	35
Toluene	<0.00202	U	0.0994	0.09088		mg/Kg		91	70 - 130	7	35
Ethylbenzene	<0.00202	U	0.0994	0.08148		mg/Kg		82	70 - 130	14	35
m-Xylene & p-Xylene	<0.00403	U	0.199	0.1538		mg/Kg		77	70 - 130	18	35
o-Xylene	<0.00202	U	0.0994	0.08412		mg/Kg		84	70 - 130	2	35

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*70 - 130*
1,4-Difluorobenzene (Surr)	*87*		*70 - 130*

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

Lab Sample ID: MB 880-60605/1-A
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60605

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		08/18/23 18:17	08/21/23 07:55	1

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

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

Lab Sample ID: MB 880-60605/1-A
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 60605

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		08/18/23 18:17	08/21/23 07:55	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0		mg/Kg		08/18/23 18:17	08/21/23 07:55	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1-Chlorooctane	*155*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 07:55*	*1*
o-Terphenyl	*171*	*S1+*	*70 - 130*	*08/18/23 18:17*	*08/21/23 07:55*	*1*

Lab Sample ID: LCS 880-60605/2-A
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 60605

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10			1000	1006		mg/Kg		101	70 - 130		
Diesel Range Organics (Over C10-C28)			1000	915.4		mg/Kg		92	70 - 130		

Surrogate		*LCS %Recovery*	*LCS Qualifier*	*Limits*
1-Chlorooctane		*96*		*70 - 130*
o-Terphenyl		*108*		*70 - 130*

Lab Sample ID: LCSD 880-60605/3-A
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 60605

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10			1000	951.8		mg/Kg		95	70 - 130	6	20
Diesel Range Organics (Over C10-C28)			1000	844.3		mg/Kg		84	70 - 130	8	20

Surrogate		*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1-Chlorooctane		*102*		*70 - 130*
o-Terphenyl		*117*		*70 - 130*

Lab Sample ID: 880-31900-A-14-F MS
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 60605

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	997	1095		mg/Kg		106	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.3	U	997	1240		mg/Kg		121	70 - 130		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1-Chlorooctane	*163*	*S1+*	*70 - 130*
o-Terphenyl	*154*	*S1+*	*70 - 130*

QC Sample Results

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

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

Lab Sample ID: 880-31900-A-14-G MSD
Matrix: Solid
Analysis Batch: 60637

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 60605

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Gasoline Range Organics (GRO)-C6-C10	<50.3	U	997	950.2		mg/Kg		91	70 - 130	14	20
Diesel Range Organics (Over C10-C28)	<50.3	U	997	1198		mg/Kg		117	70 - 130	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1-Chlorooctane	*157*	*S1+*	*70 - 130*
o-Terphenyl	*151*	*S1+*	*70 - 130*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-60092/1-A
Matrix: Solid
Analysis Batch: 60268

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			08/15/23 01:17	1

Lab Sample ID: LCS 880-60092/2-A
Matrix: Solid
Analysis Batch: 60268

Client Sample ID: Lab Control Sample
Prep Type: Soluble

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride			250	257.5		mg/Kg		103	90 - 110		

Lab Sample ID: LCSD 880-60092/3-A
Matrix: Solid
Analysis Batch: 60268

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	258.5		mg/Kg		103	90 - 110	0	20

Lab Sample ID: 890-5076-1 MS
Matrix: Solid
Analysis Batch: 60268

Client Sample ID: BH02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits		
Chloride	307		251	558.4		mg/Kg		100	90 - 110		

Lab Sample ID: 890-5076-1 MSD
Matrix: Solid
Analysis Batch: 60268

Client Sample ID: BH02
Prep Type: Soluble

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
Chloride	307		251	559.7		mg/Kg		101	90 - 110	0	20

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

GC VOA

Prep Batch: 60732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-60732/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 60782

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	8021B	60818
890-5076-2	BH03	Total/NA	Solid	8021B	60818
890-5076-3	BH04	Total/NA	Solid	8021B	60818
890-5076-4	BH05	Total/NA	Solid	8021B	60818
890-5076-5	BH06	Total/NA	Solid	8021B	60818
MB 880-60732/5-A	Method Blank	Total/NA	Solid	8021B	60732
MB 880-60818/5-A	Method Blank	Total/NA	Solid	8021B	60818
LCS 880-60818/1-A	Lab Control Sample	Total/NA	Solid	8021B	60818
LCSD 880-60818/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	60818
890-5076-1 MS	BH02	Total/NA	Solid	8021B	60818
890-5076-1 MSD	BH02	Total/NA	Solid	8021B	60818

Prep Batch: 60818

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	5035	
890-5076-2	BH03	Total/NA	Solid	5035	
890-5076-3	BH04	Total/NA	Solid	5035	
890-5076-4	BH05	Total/NA	Solid	5035	
890-5076-5	BH06	Total/NA	Solid	5035	
MB 880-60818/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-60818/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-60818/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-5076-1 MS	BH02	Total/NA	Solid	5035	
890-5076-1 MSD	BH02	Total/NA	Solid	5035	

Analysis Batch: 60911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	Total BTEX	
890-5076-2	BH03	Total/NA	Solid	Total BTEX	
890-5076-3	BH04	Total/NA	Solid	Total BTEX	
890-5076-4	BH05	Total/NA	Solid	Total BTEX	
890-5076-5	BH06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 60605

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	8015NM Prep	
890-5076-2	BH03	Total/NA	Solid	8015NM Prep	
890-5076-3	BH04	Total/NA	Solid	8015NM Prep	
890-5076-4	BH05	Total/NA	Solid	8015NM Prep	
890-5076-5	BH06	Total/NA	Solid	8015NM Prep	
MB 880-60605/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-60605/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-60605/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-31900-A-14-F MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-31900-A-14-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

GC Semi VOA

Analysis Batch: 60637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	8015B NM	60605
890-5076-2	BH03	Total/NA	Solid	8015B NM	60605
890-5076-3	BH04	Total/NA	Solid	8015B NM	60605
890-5076-4	BH05	Total/NA	Solid	8015B NM	60605
890-5076-5	BH06	Total/NA	Solid	8015B NM	60605
MB 880-60605/1-A	Method Blank	Total/NA	Solid	8015B NM	60605
LCS 880-60605/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	60605
LCSD 880-60605/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	60605
880-31900-A-14-F MS	Matrix Spike	Total/NA	Solid	8015B NM	60605
880-31900-A-14-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	60605

Analysis Batch: 60823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Total/NA	Solid	8015 NM	
890-5076-2	BH03	Total/NA	Solid	8015 NM	
890-5076-3	BH04	Total/NA	Solid	8015 NM	
890-5076-4	BH05	Total/NA	Solid	8015 NM	
890-5076-5	BH06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 60092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Soluble	Solid	DI Leach	
890-5076-2	BH03	Soluble	Solid	DI Leach	
890-5076-3	BH04	Soluble	Solid	DI Leach	
890-5076-4	BH05	Soluble	Solid	DI Leach	
890-5076-5	BH06	Soluble	Solid	DI Leach	
MB 880-60092/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-60092/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-60092/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-5076-1 MS	BH02	Soluble	Solid	DI Leach	
890-5076-1 MSD	BH02	Soluble	Solid	DI Leach	

Analysis Batch: 60268

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-5076-1	BH02	Soluble	Solid	300.0	60092
890-5076-2	BH03	Soluble	Solid	300.0	60092
890-5076-3	BH04	Soluble	Solid	300.0	60092
890-5076-4	BH05	Soluble	Solid	300.0	60092
890-5076-5	BH06	Soluble	Solid	300.0	60092
MB 880-60092/1-A	Method Blank	Soluble	Solid	300.0	60092
LCS 880-60092/2-A	Lab Control Sample	Soluble	Solid	300.0	60092
LCSD 880-60092/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	60092
890-5076-1 MS	BH02	Soluble	Solid	300.0	60092
890-5076-1 MSD	BH02	Soluble	Solid	300.0	60092

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH02
Date Collected: 08/10/23 08:55
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	60818	08/22/23 13:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60782	08/23/23 04:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			60911	08/23/23 12:26	AJ	EET MID
Total/NA	Analysis	8015 NM		1			60823	08/22/23 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	60605	08/18/23 18:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60637	08/21/23 17:04	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	60092	08/14/23 09:35	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60268	08/15/23 01:39	SMC	EET MID

Client Sample ID: BH03
Date Collected: 08/10/23 10:25
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-2
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			4.99 g	5 mL	60818	08/22/23 13:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60782	08/23/23 05:04	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			60911	08/23/23 12:26	AJ	EET MID
Total/NA	Analysis	8015 NM		1			60823	08/22/23 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.07 g	10 mL	60605	08/18/23 18:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60637	08/21/23 17:26	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	60092	08/14/23 09:35	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60268	08/15/23 02:00	SMC	EET MID

Client Sample ID: BH04
Date Collected: 08/10/23 10:50
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	60818	08/22/23 13:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60782	08/23/23 05:24	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			60911	08/23/23 12:26	AJ	EET MID
Total/NA	Analysis	8015 NM		1			60823	08/22/23 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.94 g	10 mL	60605	08/18/23 18:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60637	08/21/23 17:48	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	60092	08/14/23 09:35	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60268	08/15/23 02:07	SMC	EET MID

Client Sample ID: BH05
Date Collected: 08/10/23 11:20
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	60818	08/22/23 13:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60782	08/23/23 05:45	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			60911	08/23/23 12:26	AJ	EET MID

Lab Chronicle

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Client Sample ID: BH05

Date Collected: 08/10/23 11:20
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			60823	08/22/23 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.98 g	10 mL	60605	08/18/23 18:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60637	08/21/23 18:10	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	60092	08/14/23 09:35	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60268	08/15/23 02:14	SMC	EET MID

Client Sample ID: BH06

Date Collected: 08/10/23 11:50
Date Received: 08/10/23 14:28

Lab Sample ID: 890-5076-5
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	60818	08/22/23 13:09	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	60782	08/23/23 06:05	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			60911	08/23/23 12:26	AJ	EET MID
Total/NA	Analysis	8015 NM		1			60823	08/22/23 14:01	SM	EET MID
Total/NA	Prep	8015NM Prep			9.92 g	10 mL	60605	08/18/23 18:17	TKC	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	60637	08/21/23 18:31	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	60092	08/14/23 09:35	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	60268	08/15/23 02:22	SMC	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Laboratory: Eurofins Midland

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

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-23-26	06-30-24

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

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

Method Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

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

Protocol References:

ASTM = ASTM International

EPA = US Environmental Protection Agency

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum
Project/Site: PLU C-1 RECYCLE FACILITY

Job ID: 890-5076-1
SDG: 03C1558251

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-5076-1	BH02	Solid	08/10/23 08:55	08/10/23 14:28	1
890-5076-2	BH03	Solid	08/10/23 10:25	08/10/23 14:28	4
890-5076-3	BH04	Solid	08/10/23 10:50	08/10/23 14:28	3
890-5076-4	BH05	Solid	08/10/23 11:20	08/10/23 14:28	3
890-5076-5	BH06	Solid	08/10/23 11:50	08/10/23 14:28	3

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Chain of Custody

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

Work Order No: _____

www.xenco.com Page 1 of 1

Project Manager:	Ben Belill	Bill to: (if different)	Garrett Green
Company Name:	Ensolum, LLC	Company Name:	XTO Energy
Address:	3122 National Parks Hwy	Address:	3104 E. Greene St
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220
Phone:	989-854-0852 Email:		Garrett.Green@ExxonMobil.com

Work Order Comments

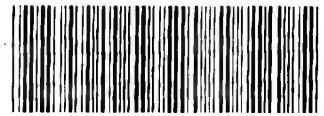
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV ☐
Deliverables: EDD ☐ ADaPT ☐ Other:

Project Name:	PLU C-1 Recycle Facility	Turn Around	
Project Number:	03C1558251	☒ Routine ☐ Rush	
Project Location:	32.21356, -103.80040	Due Date:	5 days
Sampler's Name:	Mariana O'Dell	TAT starts the day received by the lab, if received by 4:30pm	
PO #:			

SAMPLE RECEIPT			
Temp Blank:	Yes No	Wet Ice:	Yes No
Samples Received Intact:	Yes No	Thermometer ID:	TWM007
Cooler Custody Seals:	Yes No N/A	Correction Factor:	-0.2
Sample Custody Seals:	Yes No N/A	Temperature Reading:	4.2
Total Containers:		Corrected Temperature:	4.0

ANALYSIS REQUEST

Sample Identification	Matrix	Date Sampled	Time Sampled	Depth	Grab/ Comp	# of Cont	Chlorides	TPH	BTEX
BH02	S	8/10/23	8:55	1'	G	1	X	X	X
BH03			10:25	4'	G	1			
BH04			10:50	3'					
BH05			11:20	3'					
BH06			11:50	3'					



ND

Preservative Codes

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

Sample Comments

Incident #:
nAPP2311004744
bbelill@ensolum.com
modell@ensolum.com

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

	Relinquished by: (Signature)	Received by: (Signature)	Date/Time	Relinquished by: (Signature)	Received by: (Signature)	Date/Time
1			8.10.23 1428			
3				4		
5				6		

Revised Date: 08/25/2020 Rev. 2020.2

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

Chain of Custody Record

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Kramer Jessica	Carrier Tracking No(s):	COC No: 890-1426 1
Client Contact: Shipping/Receiving	Phone:	E-Mail: Jessica Kramer@et.eurofinsus com	State of Origin: New Mexico	Page: Page 1 of 1
Company: Eurofins Environment Testing South Centr		Accreditations Required (See note): NELAP - Texas		Job #: 890-5076-1
Address: 1211 W Florida Ave ,	Due Date Requested: 8/16/2023			
City: Midland	TAT Requested (days):			
State, Zip: TX, 79701				
Phone: 432-704-5440(Tel)	PO #:			
Email:	WO #:			
Project Name: PLU C-1 RECYCLE FACILITY	Project #: 89000093			
Site:	SSOW#:			

Preservation Codes

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

Other:

Analysis Requested

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8015MOD_NM/8015NM_S_Prep (MOD) Full TPH	8015MOD_Calc	300_ORGFM_28D/DI_LEACH Chloride	8021B/5035FP_Calc (MOD) BTEX	Total_BTEX_GCV	Total Number of containers	Special Instructions/Note:
Preservation Code:													
BH02 (890-5076-1)	8/10/23	08 55 Mountain		Solid			X	X	X	X	X	1	
BH03 (890-5076-2)	8/10/23	10 25 Mountain		Solid			X	X	X	X	X	1	
BH04 (890-5076-3)	8/10/23	10 50 Mountain		Solid			X	X	X	X	X	1	
BH05 (890-5076-4)	8/10/23	11 20 Mountain		Solid			X	X	X	X	X	1	
BH06 (890-5076-5)	8/10/23	11 50 Mountain		Solid			X	X	X	X	X	1	

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

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

Relinquished by: Clee	Date/Time:	Company	Received by: J Kramer	Date/Time:	Company
Relinquished by:	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time	Company

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

Ver: 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-5076-1
SDG Number: 03C1558251

Login Number: 5076
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: 890-5076-1
SDG Number: 03C1558251

Login Number: 5076
List Number: 2
Creator: Kramer, Jessica

List Source: Eurofins Midland
List Creation: 08/14/23 08:11 AM

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

ENSOLUM

APPENDIX E

NMOCD Notifications

Foust, Bryan Jacob

From: Green, Garrett J
Sent: Tuesday, May 30, 2023 10:24 PM
To: Enviro, OCD, EMNRD; Bratcher, Michael, EMNRD; Hamlet, Robert, EMNRD; Harimon, Jocelyn, EMNRD
Cc: DelawareSpills /SM; Pennington, Shelby G
Subject: XTO 24 Hour Notification - PLU C1 Water Line.

Follow Up Flag: Follow up
Flag Status: Flagged

All,

This is notification of a release greater than 25 barrels that occurred yesterday at the PLU C1 Water Line near the GPS coordinates given below. Details will be provided with a form C-141. Please contact us with any questions or concerns.

GPS: 32.21393,-103.86066

Thank you,

Thank you,

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

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

From:	Hamlet, Robert, EMNRD
To:	Collins, Melanie Suzanne
Cc:	Green, Garrett J; DelawareSpills /SM; Ben Belill; Ashley Ager; Ashley Giovengo; Bratcher, Michael, EMNRD; Wells, Shelly, EMNRD; Velez, Nelson, EMNRD
Subject:	(Extension Approval) - XTO - PLU C-1 Recycle Facility - Incident Number NAPP2316047464
Date:	Friday, August 25, 2023 5:39:31 PM
Attachments:	image003.png

[**EXTERNAL EMAIL**]

RE: Incident #**NAPP2316047464**

Melanie,

Your request for an extension to **November 25th, 2023** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

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

From: Wells, Shelly, EMNRD <Shelly.Wells@emnrd.nm.gov>
Sent: Friday, August 25, 2023 3:27 PM
To: Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>
Cc: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>
Subject: FW: [EXTERNAL] XTO - Extension Request - PLU C-1 Recycle Facility - Incident Number NAPP2316047464

From: Collins, Melanie <melanie.collins@exxonmobil.com>
Sent: Friday, August 25, 2023 12:19 PM
To: Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>; DelawareSpills /SM <DelawareSpills@exxonmobil.com>; bbelill@ensolum.com; Ashley Ager <aager@ensolum.com>; Ashley Giovengo <agiovengo@ensolum.com>
Subject: [EXTERNAL] XTO - Extension Request - PLU C-1 Recycle Facility - Incident Number NAPP2316047464

All,

XTO is requesting an extension for the current deadline of August 27, 2023 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the PLU C-1 Recycle Facility (Incident Number NAPP2316047464). The release occurred on May 27, 2023, and initial site assessment and delineation activities have been conducted. Based on delineation soil sample laboratory analytical results, excavation of impacted soil is needed. In order to complete delineation and excavation activities, review laboratory analytical results, and submit a remediation work plan or closure report, XTO requests an extension until November 25, 2023.

Thank you,

Melanie Collins

XTO ENERGY

Environmental Technician
melanie.collins@exxonmobil.com
432-556-3756

From: Collins, Melanie
To: Ben Belill; Green, Garrett J
Subject: FW: XTO - Sampling Notification (Week of 8/7/23 - 8/11/23)
Date: Monday, August 28, 2023 9:32:07 AM
Attachments: image001.png

[**EXTERNAL EMAIL**]

Here you go!

Melanie Collins
XTO ENERGY
Environmental Technician
melanie.collins@exxonmobil.com
432-556-3756

From: Collins, Melanie
Sent: Thursday, August 3, 2023 10:20 AM
To: ocd.enviro (ocd.enviro@emnrd.nm.gov) <ocd.enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD (Robert.Hamlet@emnrd.nm.gov) <Robert.Hamlet@emnrd.nm.gov>; Bratcher, Michael, EMNRD (mike.bratcher@emnrd.nm.gov) <mike.bratcher@emnrd.nm.gov>; Harimon, Jocelyn, EMNRD (Jocelyn.Harimon@emnrd.nm.gov) <Jocelyn.Harimon@emnrd.nm.gov>
Cc: Green, Garrett J <garrett.green@exxonmobil.com>
Subject: XTO - Sampling Notification (Week of 8/7/23 - 8/11/23)

All,

XTO plans to complete final sampling activities at the sites listed below for the week of August 7, 2023.

Thursday
- PLU C-1 Recycle Facility / nAPP2316047464

Friday
- BEU 70 / NAPP2318139530

Thank you,

Melanie Collins
XTO ENERGY
Environmental Technician
melanie.collins@exxonmobil.com

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

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

CONDITIONS

Action 287960

CONDITIONS

Operator: XTO ENERGY, INC 6401 Holiday Hill Road Midland, TX 79707	OGRID: 5380
	Action Number: 287960
	Action Type: [C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
scwells	If you want to get reclamation approval when you submit this closure report, OCD is looking for the following: Executive Summary of the reclamation activities; Scaled Site Map including sampling locations; Analytical results including results showing that any remaining impacts meet the reclamation standards and results to prove the backfill is non-waste containing; At least one (1) representative 5-point composite sample will need to be collected from the backfill material that will be used for the reclamation of the top four feet of the excavation. Pictures of the backfilled areas showing that the area is back, as nearly as practical, to the original condition or the final land use and maintain those areas to control dust and minimize erosion to the extent practical; pictures of the top layer, which is either the background thickness of topsoil or one foot of suitable material to establish vegetation at the site, whichever is greater; and revegetation plan.	3/6/2024