Page 1 of 203 Incident ID NAPP2223832773 District RP Facility ID Application ID

Closure

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

Closure Report Attachment Checklist: Each of the following	items must be included in the closure report.			
A scaled site and sampling diagram as described in 19.15.29.11 NMAC				
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)				
☐ Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)			
Description of remediation activities				
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in			
Printed Name: _ Garrett Green	Title: _SSHE Coordinator			
Signature:Satt Surr	Date: 11/10/2022			
email:garrett.green@exxonmobil.com	Telephone:575-200-0729			
OCD Only				
Received by:Jocelyn Harimon	Date:11/10/2022			
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible for regulations.			
Closure Approved by: <u>Robert Hamlet</u>	Date: <u>2/3/2023</u>			
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced			

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

State of New Mexico Energy Minerals and Natural Resources Department

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-141 Revised August 24, 2018 Submit to appropriate OCD District office

Incident ID	NAPP2223832773
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Г							
Responsible Party XTO Energy					2300		
Contact Nan				Contact Te	elephone 575-200-0729		
Contact ema	^{il} garrett.gre	en@exxonmobil.c	om	Incident #	(assigned by OCD)		
		3104 E. Greene St		w Mexico, 88220			
			Location	of Release So	ource		
Latitude 32.	12442°			Longitude	-103.89635°		
Lamude			(NAD 83 in de	_ tongitude cimal degrees to 5 decim	nal places)		
Site Name		~		Site Type	Tank Battery		
1	PLU Pierce (API# (if app			
Date Release	Discovered	08/15/2022		AF1# (ij app	licanie)		
Unit Letter	Section	Township	Range	Coun	ıty		
P	17	25S	30E	Edd	<u>·</u>		
	1 ,	200	302		,		
Surface Owne	r: State	🗷 Federal 🗌 Tı	ribal Private (A	Name:)		
			NI - 4	J X7-1 T	Dalaana		
			Nature and	d Volume of F	Release		
				calculations or specific	justification for the volumes provided below)		
Crude Oi	1	Volume Release	ed (bbls) 0.	11	Volume Recovered (bbls) 0.00		
Produced	Water	Volume Release	ed (bbls)		Volume Recovered (bbls)		
			tion of total dissol		☐ Yes ☐ No		
Condensa	nte.	in the produced Volume Release	water >10,000 mg	9/1?	Volume Recovered (bbls)		
☐ Natural C		Volume Release	, ,		Volume Recovered (Mcf)		
					, ,		
Other (de	escribe)	Volume/Weight	Released (provide	e units)	Volume/Weight Recovered (provide units)		
G OD 1							
Cause of Rel	ease The oil	dump controller f	ailed, causing a sr	nall amount of oil to	o exit the flare and ignite. Fire self-extinguished with no		
	damage	e to equipment. No	injuries were rep	orted. A third-party	contractor has been retained for remediation purposes.		

Received by OCD: 11/10/2022/1/55:12/PM State of New Mexico
Page 2 Oil Conservation Division

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Incident ID	NAPP2223832773
District RP	
Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respo	nsible party consider this a major release?					
release as defined by	Fire at facility.						
19.15.29.7(A) NMAC?							
🗶 Yes 🗌 No							
		nom? When and by what means (phone, email, etc)?					
Yes, by Jake Foust to ocd	.enviro@state.nm.us, Mike Bratcher, and R	obert Hamlet on 08/16/2022 via email.					
	Initial R	esponse					
The responsible	party must undertake the following actions immediate	ly unless they could create a safety hazard that would result in injury					
➤ The source of the rela	ease has been stopped.						
The impacted area ha	as been secured to protect human health and	the environment.					
Released materials ha	ave been contained via the use of berms or	dikes, absorbent pads, or other containment devices.					
★ All free liquids and re	ecoverable materials have been removed an	d managed appropriately.					
If all the actions describe	d above have <u>not</u> been undertaken, explain	why:					
NA							
has begun, please attach	a narrative of actions to date. If remedial	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred blease 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						
		fications and perform corrective actions for releases which may endanger OCD does not relieve the operator of liability should their operations have					
failed to adequately investig	gate and remediate contamination that pose a three	eat to groundwater, surface water, human health or the environment. In					
addition, OCD acceptance of and/or regulations.	of a C-141 report does not relieve the operator of	responsibility for compliance with any other federal, state, or local laws					
Printed Name: Garrett G	reen	Title: SSHE Coordinator					
P	At Sum	Date:					
Signature:	no Suar						
email: garrett.green@exx	Konmobil.com	Telephone: 575-200-0729					
OCD Only							
OCD Only							
Received by: Jocelyn	Harimon	Date: 08/26/2022					

Location:	PLU Pierce Canyon 17 Battery		
Spill Date:	8/15/2022		
	Area 1		
Approximate A	rea =	956.00	sq. ft.
Average Satura	tion (or depth) of spill =	0.25	inches
Average Porosi	ty Factor =	0.03	
	VOLUME OF LEAK		
Total Crude Oil	=	0.11	bbls
Total Produced	Water =	0.00	bbls
	TOTAL VOLUME OF LEAK		
Total Crude Oi	=	0.11	bbls
Total Produced	l Water =	0.00	bbls
	TOTAL VOLUME RECOVERED		
Total Crude Oi	=	0.00	bbls
Total Produced	l Water =	0.00	bbls

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

District II 811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 138390

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	138390
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Ī	Created By		Condition Date
Ī	jharimon	None	8/29/2022

	Page 6 of 20	3
Incident ID	NAPP2223832773	
District RP		
Facility ID		
Application ID		

Site Assessment/Characterization

This information must be provided to the appropriate district office no taler than 20 days after the release discovery date.					
What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (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.

Received by OCD: 11/10/2022 1:55:12 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

Incident ID NAPP2223832773
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 _______

Date: __11/10/2022 ______

Telephone: __575-200-0729 _______

OCD Only

Received by: __Jocelyn Harimon _______ Date: __11/10/2022 _______

	Page 8 of 203	3
Incident ID	NAPP2223832773	
District RP		
Facility ID		
Application ID		

Closure

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

items must be included in the closure report.
.11 NMAC
s of the liner integrity if applicable (Note: appropriate OCD District office
OC District office must be notified 2 days prior to final sampling)
lete to the best of my knowledge and understand that pursuant to OCD rules in release notifications and perform corrective actions for releases which of a C-141 report by the OCD does not relieve the operator of liability emediate contamination that pose a threat to groundwater, surface water, f a C-141 report does not relieve the operator of responsibility for lations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Title: _SSHE Coordinator
Date: 11/10/2022 Telephone:575-200-0729
Date:11/10/2022
y of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible lor regulations.
Date:
Title:



November 10, 2022

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

Re: Closure Request

PLU Pierce Canyon 17

Incident Number NAPP2223832773

Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum) on behalf of XTO Energy, Inc. (XTO), has prepared this *Closure Request* to document excavation and soil sampling activities completed to address impacted soil at the PLU Pierce Canyon 17 (Site). Soil was impacted due to a release of crude oil and flare fire at the Site. Based on excavation activities and laboratory analytical results, XTO is submitting this Closure Request describing remediation actions completed to date and requesting closure for Incident Number NAPP2223832773.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit P, Section 17, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.12442° N, 103.89635° W) and is associated with oil and gas exploration and production operations on Federal Land managed by the Bureau of Land Management (BLM).

On August 15, 2022, the oil dump controller failed, resulting in the release of approximately 0.11 barrel (bbl) of crude oil to exit the flare and ignite on the surface of the well pad. The fluids were consumed and there was nothing to recover. The fire extinguished by itself. XTO notified the New Mexico Oil Conservation Division (NMOCD) immediately via email on August 16, 2022 and submitted a Release Notification Form C-141 (Form C-141) on August 25, 2022. The release was assigned Incident Number NAPP2223832773.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is USGS well 320628103533001, located approximately 1.1 miles south of the Site. The groundwater well has a reported depth to groundwater of approximately 264 feet bgs and a total depth of 288 feet bgs. Ground surface elevation at the groundwater well location is 3,216 feet above mean sea level (amsl), which is approximately 27 feet lower in elevation than the Site. All wells used for

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Hwy | Carlsbad, NM 88220 | ensolum.com XTO Energy, Inc Closure Request PLU Pierce Canyon 17

depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is a dry wash, located approximately 3,406 feet southeast of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

Based on the results of the Site Characterization, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

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

SITE ASSESSMENT ACTIVITIES

On September 23, 2022, site assesment activities were conducted to evaluate the release extent based on information provided on the Form C-141 and visual observations. Ensolum personnel collected five delineation soil samples (SS01 through SS05) at an approximate depth of 0.5 feet bgs. The delineation soil samples were collected within and around the release extent to assess for the presence or absence of impacted soil. The delineation soil samples were field screened for volatile aromatic hydrocarbons (VOCs) and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and delineation soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in 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 at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of concern (COC): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for delineation soil sample SS01 indicated that GRO/DRO and TPH concentrations exceeded the Closure Criteria. Laboratory analytical results for delineation soil sample SS02 indicated that TPH concentration exceeded the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical, additional remediation activities were warranted.

XTO Energy, Inc Closure Request PLU Pierce Canyon 17

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

Between September 28, and October 26, 2022, Ensolum personnel oversaw delineation and excavation activities. Delineation soil samples PH01 and PH02 were advanced by use of heavy equipment to assess the vertical extent of the release. PH01 and PH02 delineation soil samples were collected in the vicinity of SS01 and SS02, respectively, and were advanced to an approximate total depth of 1-foot bgs. Soil from each pothole were field screened as described above. Field screening results and observations were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2.

Soil was excavated from the release area as indicated by visible staining, elevated field screening, and laboratory analytical results. Following the removal of the impacted soil, 5-point composite soil samples were collected at least every 200 square feet from the floor and sidewall of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Excavation soil samples FS01 through FS07 were collected from the floor of the excavation at an approximate depth of 1-foot bgs. Excavation soil samples FS02A, FS04A, FS05A, and FS07A, were collected from the floor of the excavation at an approximate depth of 2 feet bgs. Excavation soil samples SW01 and SW02 were collected from the sidewalls of the excavation at depths ranging from ground surface to 2 feet bgs. The excavation extent and excavation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 1,300 square feet. A total of approximately 100 cubic yards of soil were removed during the excavation activities. The soil was transported and properly disposed of at the R360 Landfill Facility in Hobbs, New Mexico.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for confirmation soil samples collected from the final excavation extent indicated that all COC concentrations are compliant with the Closure Criteria and the strictest Table I Closure Criteria. Laboratory analytical results are summarized in Table I and laboratory analytical reports are included in Appendix D. NMOCD notifications for the sampling events are included in Appendix E.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the release of crude oil resulting in a flare fire. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated all COC concentrations were compliant with the Site Closure Criteria and the strictest Table I Closure Criteria. Based on the soil sample analytical results, no further remediation was required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs, and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions is protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2223832773.

XTO Energy, Inc Closure Request PLU Pierce Canyon 17

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

Sincerely, **Ensolum**, **LLC**

Anita Thapalia, P.G. Project Geologist

Ashley L. Ager, P.G. Program Director

ashley L. ager

cc: Garrett Green, XTO

Shelby Pennington, XTO Bureau of Land Management

Appendices:

Figure 1 Site Receptor Map

Figure 2 Delineation Soil Sample Locations
Figure 3 Excavation Soil Sample Locations
Table 1 Soil Sample Analytical Results
Appendix A Referenced Well Records

Appendix B Photographic Log

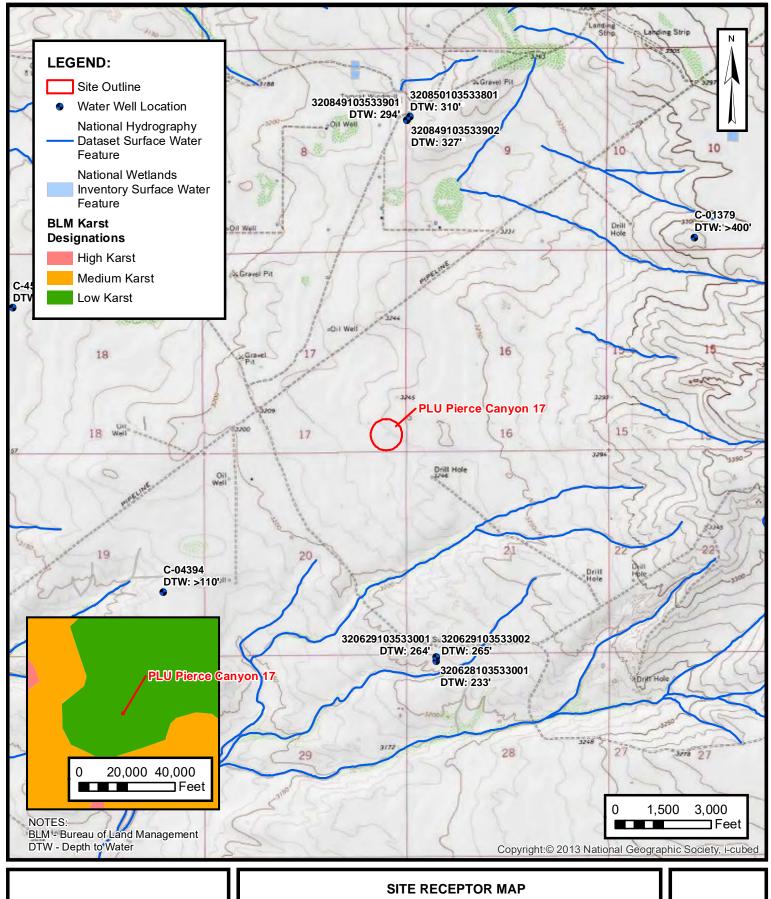
Appendix C Lithologic / Soil Sampling Logs

Appendix D Laboratory Analytical Reports & Chain-of-Custody Documentation

Appendix E NMOCD Notifications



FIGURES



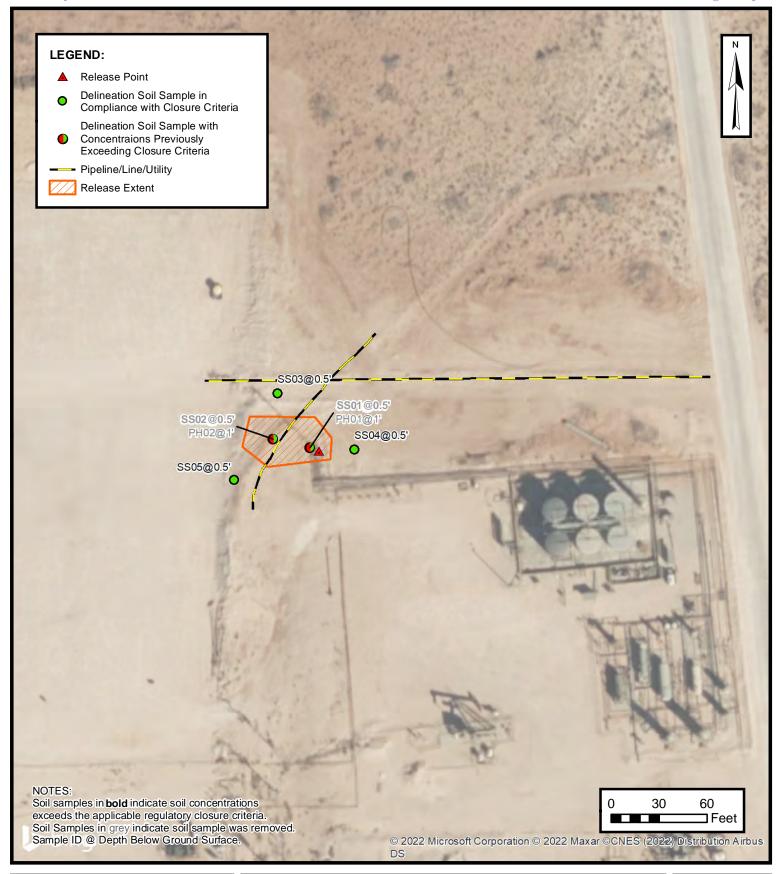


XTO ENERGY, INC PLU PIERCE CANYON 17 Incident ID NAPP2223832773

Incident ID NAPP2223832773 Unit P, Sec 17, T25S, R30E Eddy County, New Mexico 1

FIGURE

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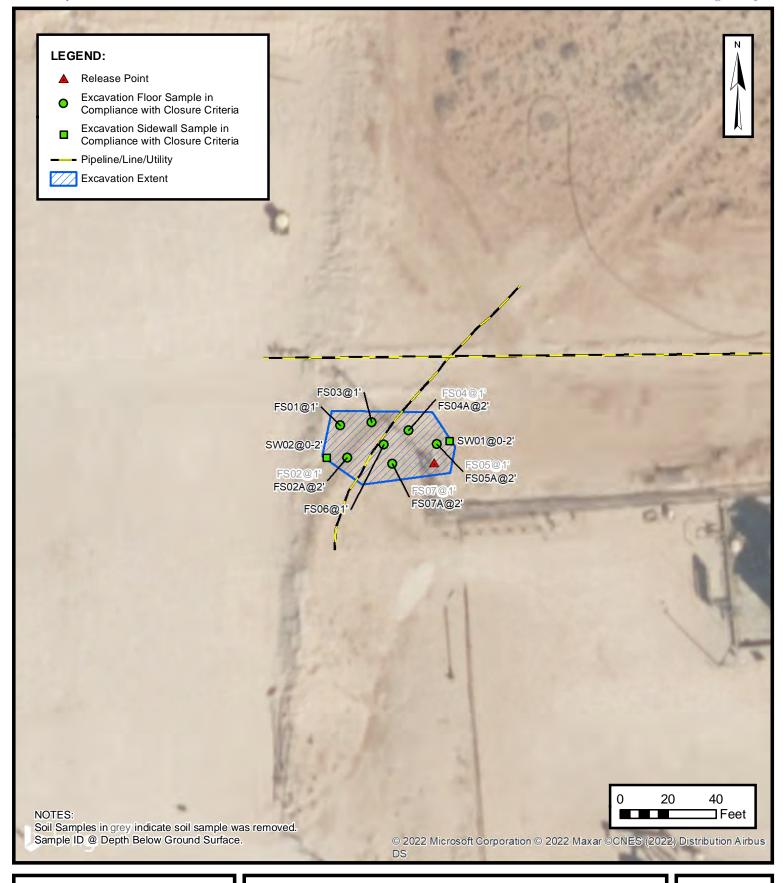




DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
PLU PIERCE CANYON 17
Incident ID NAPP2223832773
Unit P, Sec 17, T25S, R30E
Eddy County, New Mexico

FIGURE





EXCAVATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC PLU PIERCE CANYON 17 Incident ID NAPP2223832773 Unit P, Sec 17, T25S, R30E

Eddy County, New Mexico

FIGURE



TABLES



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS PLU Pierce Canyon 17 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 1	Closure Criteria ((NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
				Deli	neation Soil Sa	mples				
SS01	09/23/2022	0.5	<0.00198	< 0.00397	<49.9	4,290	654	4,290	4,940	216
PH01	09/28/2022	1	< 0.00199	<0.00398	<50.0	563	99.4	563	662.4	216
SS02	09/23/2022	0.5	<0.00200	< 0.00401	<49.9	1,110	212	1,110	1,320	213
PH02	09/28/2022	1	< 0.00201	< 0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	61.6
SS03	09/23/2022	0.5	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	80.6
SS04	09/23/2022	0.5	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	41.4
SS05	09/23/2022	0.5	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	42.6
				Excavation	Confirmation S	Soil Samples				
FS01	09/28/2022	1	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	298
FS02	09/28/2022	1	<0.00200	<0.00399	<50.0	105	<50.0	105	105	339
FS02A	10/26/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	113
FS03	09/28/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	271
FS04	09/28/2022	1	<0.00200	<0.00399	<50.0	89.5	<50.0	89.5	89.5	650
FS04A	10/26/2022	2	< 0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	88.4
FS05	09/28/2022	1	< 0.00199	<0.00398	<49.9	53.2	<49.9	53.2	53.2	639
FS05A	10/26/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	38.3
FS06	09/28/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	74.4
FS07	09/28/2022	1	<0.00198	< 0.00396	<49.9	195	<49.9	195	195	287
FS07A	10/26/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	69.2
SW01	10/26/2022	0-2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	211
SW02	10/26/2022	0-2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	90.1

Notes:

bgs: below ground surface mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

 $\label{eq:BTEX:Benzene} \mbox{BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes}$

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation standard where applicable.

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

NMAC: New Mexico Administrative Code

grey text indicates soil sample removed during excavation activities

Ensolum 1 of 1



APPENDIX A

Referenced Well Records



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

- Explore the NEW <u>USGS National Water Dashboard</u> interactive map to access real-time water data from over 13,500 stations nationwide.
- Attention current WaterAlert users: NextGen WaterAlert is replacing Legacy WaterAlert. You must take action before 9/30/2022 to retain your alerts. Read more.
- Full News

Table of data

Tab-separated data

Graph of data

Groundwater levels for the Nation

Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs site_no list =

320628103533001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320628103533001 25S.30E.21.333424

Eddy County, New Mexico Latitude 32°06'28", Longitude 103°53'30" NAD27 Land-surface elevation 3,207 feet above NAVD88 The depth of the well is 288 feet below land surface.

This well is completed in the Pecos River Basin alluvial aquifer (N100PCSRVR) national aquifer.

This well is completed in the Alluvium, Bolson Deposits and Other Surface Deposits (110AVMB) local aquifer.

Output formats

Date	Time	? Water- level date- time accuracy	? Parameter code	Water level, feet below land surface	Water level, feet above specific vertical datum	Referenced vertical datum	? Status	? Method of measurement	? Measuring agency	? Source measu
1958-08-21		D	62610		2972.36	NGVD29	1	Z		
1958-08-21		D	62611		2974.00	NAVD88	1	Z		
1958-08-21		D	72019	233.00			1	Z		
1959-02-05		D	62610		2939.26	NGVD29	Р	Z		
1959-02-05		D	62611		2940.90	NAVD88	Р	Z		
1959-02-05		D	72019	266.10			Р	Z		
1983-02-01		D	62610		2945.48	NGVD29	1	Z		
1983-02-01		D	62611		2947.12	NAVD88	1	Z		
1983-02-01		D	72019	259.88			1	Z		
1998-01-28		D	62610		2940.76	NGVD29	1	S		
1998-01-28		D	62611		2942.40	NAVD88	1	S		
1998-01-28		D	72019	264.60			1	S		

Explanation

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

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

Accessibility FOIA Privacy Policies and Notices

U.S. Department of the Interior | U.S. Geological Survey Title: Groundwater for USA: Water Levels

URL: https://nwis.waterdata.usgs.gov/nwis/gwlevels?

Page Contact Information: <u>USGS Water Data Support Team</u> Page Last Modified: 2022-08-29 12:27:10 EDT 0.29 0.25 nadww01

USA.gov



APPENDIX B

Photographic Log

E ENSOLUM

Photographic Log

XTO Energy, Inc PLU Pierce Canyon 17 Incident No. NAPP2223832773



Photograph: 1 Date: 8/15/2022 Description: Charred/staining of the release extent

View: West



Photograph: 2 Date: 9/28/2022 Description: Charred/staining of the release extent

View: East



Photograph: 3 Date: 9/28/2022

Description: Delineation activities.

View: North



Photograph: 4 Date: 10/26/2022

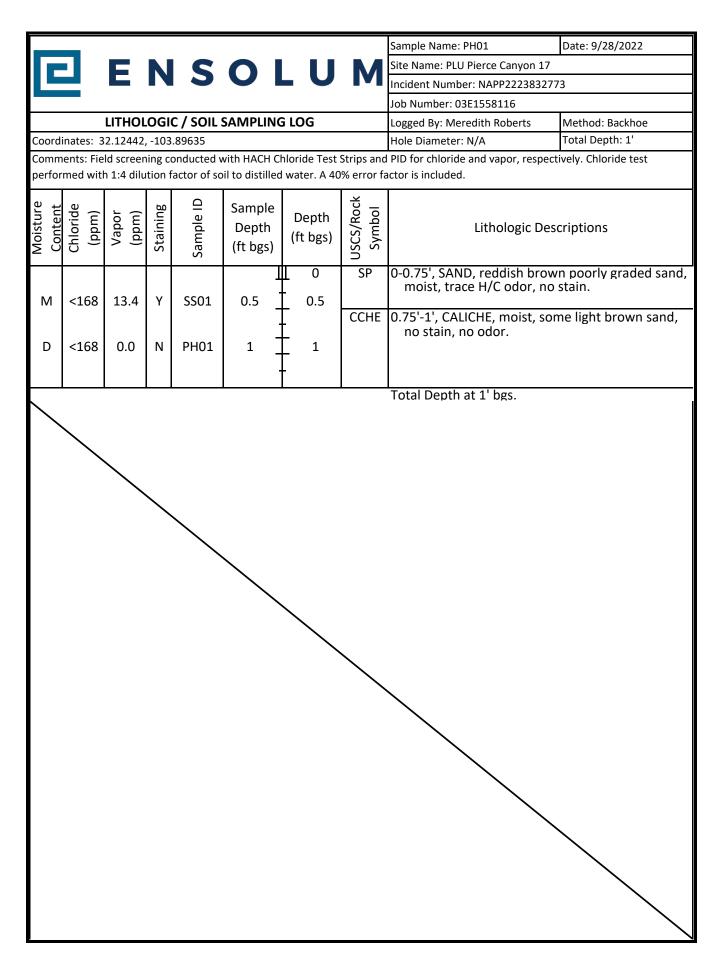
Description: Excavation activities.

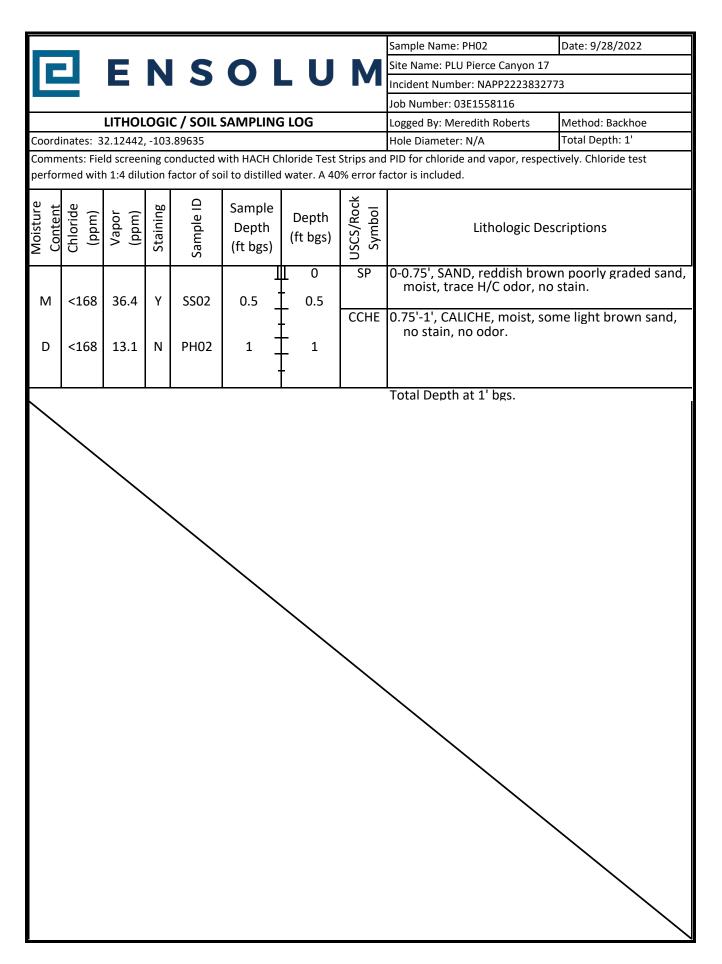
View: West



APPENDIX C

Lithologic Soil Sampling Logs







APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3048-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

MRAMER

Authorized for release by: 10/6/2022 11:48:41 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 2/3/2023 11:35:16 AM

ı

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

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

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Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3048-1
SDG: 03E1558116

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	0	

Definitions/Glossary

Job ID: 890-3048-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

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 Colony Forming Unit CFU **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) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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

Toxicity Equivalent Factor (Dioxin) TFF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum Job ID: 890-3048-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Job ID: 890-3048-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3048-1

Receipt

The sample was received on 9/23/2022 3:47 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA

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

GC Semi VOA

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

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

Matrix: Solid

Lab Sample ID: 890-3048-1

Client Sample Results

Client: Ensolum Job ID: 890-3048-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS05

Date Collected: 09/23/22 10:00 Date Received: 09/23/22 15:47

Sample Depth: 6'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/04/22 13:34	10/05/22 19:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		70 - 130			10/04/22 13:34	10/05/22 19:18	1
1,4-Difluorobenzene (Surr)	105		70 - 130			10/04/22 13:34	10/05/22 19:18	1
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403	mg/Kg			10/06/22 12:33	1
-		J	0.00400	mg/rtg			10/00/22 12:00	•
• •	ol Pango Organ			mg/Ng			10/00/22 12:00	
: Method: SW846 8015 NM - Diese	•	ics (DRO) (GC)		D	Prepared		Dil Fac
• •	•	ics (DRO) (Unit	<u>D</u>	Prepared	Analyzed 09/28/22 09:15	Dil Fac
Method: SW846 8015 NM - Diese Analyte	Result	ics (DRO) (GC)		<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte	Result <50.0	ics (DRO) (Control of the Control of	RL 50.0	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Die	Result <50.0 sel Range Orga	ics (DRO) (Control of the Control of	RL 50.0	Unit	<u>D</u>	Prepared Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Result <50.0 sel Range Orga	ics (DRO) ((Qualifier U unics (DRO) Qualifier	RL 50.0	Unit mg/Kg	=		Analyzed 09/28/22 09:15	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte	Result <50.0 sel Range Orga Result	ics (DRO) ((Qualifier U unics (DRO) Qualifier U	GC) RL 50.0 (GC) RL	Unit mg/Kg	=	Prepared	Analyzed 09/28/22 09:15 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 sel Range Orga Result <50.0	ics (DRO) ((Qualifier U unics (DRO) Qualifier U	(GC) RL 50.0 RL 50.0	Unit mg/Kg Unit mg/Kg	=	Prepared 09/27/22 11:43	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	ics (DRO) ((Qualifier U unics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 09/27/22 11:43	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24 09/28/22 04:24	1 Dil Fac 1 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	ics (DRO) ((Qualifier U unics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 09/27/22 11:43 09/27/22 11:43	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24 09/28/22 04:24	Dil Fac 1 1 Dil Fac Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0	ics (DRO) ((Qualifier U unics (DRO) Qualifier U U	GC) RL 50.0 (GC) RL 50.0 50.0 50.0 Limits	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 09/27/22 11:43 09/27/22 11:43 09/27/22 11:43 Prepared	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24 09/28/22 04:24 09/28/22 04:24 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <50.0	ics (DRO) ((Qualifier U unics (DRO) Qualifier U U Qualifier	GC) RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 09/27/22 11:43 09/27/22 11:43 09/27/22 11:43 Prepared 09/27/22 11:43	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24 09/28/22 04:24 Analyzed 09/28/22 04:24	1 Dil Fac 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	ics (DRO) ((Qualifier U unics (DRO) Qualifier U U Qualifier	GC) RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg	=	Prepared 09/27/22 11:43 09/27/22 11:43 09/27/22 11:43 Prepared 09/27/22 11:43	Analyzed 09/28/22 09:15 Analyzed 09/28/22 04:24 09/28/22 04:24 Analyzed 09/28/22 04:24	1 Dil Fac 1 1 1 1 Dil Fac 1

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Surrogate Summary

Client: Ensolum Job ID: 890-3048-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19583-A-1-E MS	Matrix Spike	97	105	
880-19583-A-1-F MSD	Matrix Spike Duplicate	93	93	
890-3048-1	SS05	122	105	
LCS 880-36058/1-A	Lab Control Sample	93	95	
LCSD 880-36058/2-A	Lab Control Sample Dup	95	104	
MB 880-36058/5-A	Method Blank	93	84	
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene (Surr)			
DFBZ = 1,4-Difluoroben	zene (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)	
890-3046-A-1-E MS	Matrix Spike	106	99	
890-3046-A-1-F MSD	Matrix Spike Duplicate	95	89	
890-3048-1	SS05	99	100	
LCS 880-35513/2-A	Lab Control Sample	98	102	
LCSD 880-35513/3-A	Lab Control Sample Dup	114	124	
MB 880-35513/1-A	Method Blank	109	112	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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QC Sample Results

Client: Ensolum Job ID: 890-3048-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36058/5-A

Lab Sample ID: LCS 880-36058/1-A

Matrix: Solid

Analysis Batch: 36122

Matrix: Solid Analysis Batch: 36122 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36058

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:34	10/05/22 10:04	•
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:34	10/05/22 10:04	,
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:34	10/05/22 10:04	,
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/22 13:34	10/05/22 10:04	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:34	10/05/22 10:04	,
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/22 13:34	10/05/22 10:04	•

MB MB

Surrogate	%Recovery	Qualifier	Limits	P	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130	10/0	04/22 13:34	10/05/22 10:04	1
1,4-Difluorobenzene (Surr)	84		70 - 130	10/0	04/22 13:34	10/05/22 10:04	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36058

Prep Type: Total/NA

Prep Batch: 36058

35

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1062 mg/Kg 106 70 - 130 Toluene 0.100 0.1099 mg/Kg 110 70 - 130 0.100 0.1085 108 Ethylbenzene mg/Kg 70 - 130 0.200 70 - 130 m-Xylene & p-Xylene 0.2271 mg/Kg 114 0.100 70 - 130 o-Xylene 0.1130 mg/Kg 113

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	93	70 - 130
1,4-Difluorobenzene (Surr)	95	70 - 130

Lab Sample ID: LCSD 880-36058/2-A Client Sample ID: Lab Control Sample Dup

0.1210

Matrix: Solid

Analyte Benzene Toluene Ethylbenzene m-Xylene & p-Xylene

o-Xylene

Analysis Batch: 36122

Spike	LCSD	LCSD				%Rec		RPD	
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
 0.100	0.1225		mg/Kg		123	70 - 130	14	35	
0.100	0.1214		mg/Kg		121	70 - 130	10	35	
0.100	0.1147		mg/Kg		115	70 - 130	6	35	
0.200	0.2404		mg/Kg		120	70 - 130	6	35	

mg/Kg

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1.4-Difluorobenzene (Surr)	104		70 ₋ 130

Lab Sample ID: 880-19583-A-1-E MS

Matrix: Solid

Analysis Batch: 36122

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

70 - 130

121

Prep Batch: 36058

		Sample	Sample	Spike	MS	MS				%Rec	
	Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Benzene	<0.00201	U	0.101	0.1148		mg/Kg		114	70 - 130	
١	Toluene	<0.00201	U	0.101	0.1165		mg/Kg		115	70 - 130	

0.100

Eurofins Carlsbad

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36058

QC Sample Results

Client: Ensolum Job ID: 890-3048-1 SDG: 03E1558116 Project/Site: PLU Pierce Canyon 17

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

Lab Sample ID: 880-19583-A-1-E MS

Analysis Batch: 36122

Matrix: Solid

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.101	0.1110		mg/Kg		110	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.202	0.2316		mg/Kg		115	70 - 130	
o-Xylene	<0.00201	U	0.101	0.1157		mg/Kg		115	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	97	70 - 130
1,4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: 880-19583-A-1-F MSD

Matrix: Solid Analysis Batch: 36122									•	Type: To Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0994	0.09598		mg/Kg		97	70 - 130	18	35
Toluene	<0.00201	U	0.0994	0.1014		mg/Kg		101	70 - 130	14	35
Ethylbenzene	<0.00201	U	0.0994	0.09947		mg/Kg		100	70 - 130	11	35
m-Xylene & p-Xylene	<0.00402	U	0.199	0.2082		mg/Kg		105	70 - 130	11	35
o-Xylene	<0.00201	U	0.0994	0.1035		mg/Kg		104	70 - 130	11	35

MSD MSD

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

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

Lab Sample ID: MB 880

Matrix: Solid

Analysis Batch: 35458

80-35513/1-A	Client Sample ID: Method Blank
	Prep Type: Total/NA
58	Prep Batch: 35513
MB MB	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/27/22 11:43	09/27/22 20:58	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/27/22 11:43	09/27/22 20:58	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/27/22 11:43	09/27/22 20:58	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	109		70 - 130	09/	/27/22 11:43	09/27/22 20:58	1
o-Terphenyl	112		70 - 130	09/	/27/22 11:43	09/27/22 20:58	1

Lab Sample ID: LCS 880-35513/2-A

Matrix: Solid							Prep Ty	/pe: Tot	al/NA
Analysis Batch: 35458	Prep E					Batch: 3	35513		
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	820.1		mg/Kg		82	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1005		mg/Kg		100	70 - 130		
C10-C28)									

Eurofins Carlsbad

Client Sample ID: Lab Control Sample

Job ID: 890-3048-1

SDG: 03E1558116

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

Lab Sample ID: LCS 880-35513/2-A

Lab Sample ID: 890-3046-A-1-E MS

Lab Sample ID: 890-3046-A-1-F MSD

Project/Site: PLU Pierce Canyon 17

Matrix: Solid

Client: Ensolum

Analysis Batch: 35458

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35513

LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 - 130 o-Terphenyl 102 70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35513

Lab Sample ID: LCSD 880-35513/3-A **Matrix: Solid** Analysis Batch: 35458

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 897.0 90 70 - 1309 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1217 mg/Kg 122 70 - 13019 20

C10-C28)

Matrix: Solid

Analysis Batch: 35458

LCSD LCSD

Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 114 124 70 - 130 o-Terphenyl

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 35513

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits D Gasoline Range Organics <50.0 U 998 914.1 mg/Kg 92 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 1142 mg/Kg 114 70 - 130

C10-C28)

MS MS

%Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 106 o-Terphenyl 99 70 - 130

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

> > Prep Batch: 35513

RPD %Rec

Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 999 849.3 85 Gasoline Range Organics <50.0 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 1043 mg/Kg 104 70 - 130 20

Spike

MSD MSD

C10-C28)

Matrix: Solid

Analysis Batch: 35458

MSD MSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 95 70 - 130 89 70 - 130 o-Terphenyl

Eurofins Carlsbad

QC Sample Results

Client: Ensolum Job ID: 890-3048-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35475/1-A

Matrix: Solid

Analysis Batch: 35532

Client Sample ID: Method Blank **Prep Type: Soluble**

MB MB Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 09/28/22 10:56

Lab Sample ID: LCS 880-35475/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 234.7 mg/Kg 94 90 - 110

Lab Sample ID: LCSD 880-35475/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 234.5 mg/Kg 90 - 110

Lab Sample ID: 890-3047-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35532

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 230 249 494.5 106 90 - 110 mg/Kg

Lab Sample ID: 890-3047-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35532

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 230 465.1 mg/Kg 94 90 - 110 6 20

QC Association Summary

Client: Ensolum Job ID: 890-3048-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC VOA

Prep Batch: 36058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	5035	
MB 880-36058/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36058/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36058/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19583-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19583-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	8021B	36058
MB 880-36058/5-A	Method Blank	Total/NA	Solid	8021B	36058
LCS 880-36058/1-A	Lab Control Sample	Total/NA	Solid	8021B	36058
LCSD 880-36058/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36058
880-19583-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	36058
880-19583-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36058

Analysis Batch: 36266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35458

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	8015B NM	35513
MB 880-35513/1-A	Method Blank	Total/NA	Solid	8015B NM	35513
LCS 880-35513/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35513
LCSD 880-35513/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35513
890-3046-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	35513
890-3046-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35513

Prep Batch: 35513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	8015NM Prep	
MB 880-35513/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35513/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35513/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3046-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3046-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Soluble	Solid	DI Leach	
MB 880-35475/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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Page 11 of 20

QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17

Job ID: 890-3048-1
SDG: 03E1558116

HPLC/IC (Continued)

Leach Batch: 35475 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3048-1	SS05	Soluble	Solid	300.0	35475
MB 880-35475/1-A	Method Blank	Soluble	Solid	300.0	35475
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	300.0	35475
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35475
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	35475
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35475

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12

13

Date Received: 09/23/22 15:47

Lab Chronicle

Client: Ensolum Job ID: 890-3048-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS05 Lab Sample ID: 890-3048-1 Date Collected: 09/23/22 10:00

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	36058	10/04/22 13:34	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36122	10/05/22 19:18	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36266	10/06/22 12:33	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35564	09/28/22 09:15	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35513	09/27/22 11:43	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35458	09/28/22 04:24	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35475	09/27/22 09:07	KS	EET MID
Soluble	Analysis	300.0		1			35532	09/28/22 13:27	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 Job ID: 890-3048-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pr	rogram	Identification Number	Expiration Date	
Texas		LAP T104704400-22-24		06-30-23	
The following analytes the agency does not of	. ,	ut the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes fo	
Analysis Method	Prep Method	Matrix	Analyte		
8015 NM		Solid	Total TPH		

Method Summary

Job ID: 890-3048-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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	MCAWW	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

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3048-1

SDG: 03E1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3048-1	SS05	Solid	09/23/22 10:00	09/23/22 15:47	6'

Relinquished by: (Signature)

200

4/83/22

1597

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020 2

Received by: (Signature)

eurofins:

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

				20, 1000 (202) 202 :	(1000) THE (010) COLT COL, COLDON, THE (010) COLD CITY	www.xenco.com	o.com Page of
Project Manager: Be	Ben Belill		Bill to: (if different)	៧) Garrett Green		Work C	Work Order Comments
	Ensolum		Company Name:			Program: UST/PST PRP]PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
	3122 National Parks Hwy	W	Address:		St.	State of Project:	
e ZIP:	Carlsbad, NM 88220		City, State ZIP:	Carlsbad, NM 88220	38220	Reporting: Level II Level III PST/UST TRRP	PST/UST TRRP Level IV
	989-854-0852		Email: bbelill@ensolum.com	um.com		Deliverables: EDD	ADaPT Other:
Project Name:	PLU Pierce Canyon 17	on 17	Turn Around		ANALYSIS REC	QUEST	Preservative Codes
Project Number:	03E1558116	☑ Routine	utine 🗌 Rush	Code			None: NO DI Water: H ₂ O
Project Location:	32.12442, -103.89635	9635 Due Date:	Date:				Cool: Cool MeOH: Me
Sampler's Name:	Meredith Roberts		tarts the day received by				
		the la	the lab, if received by 4:30pm	rs			H ₂ S0 ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes No Wet Ice:	Ice: (Yes) No	nete			H ₃ PO ₄ : HP
Samples Received Intact:	(Yes No	Thermometer ID:	Tam D	-			NaHSO ₄ : NABIS
Cooler Custody Seals:	Yes No NA	Correction Factor:	1.00.6				Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	Yes No N/A	Temperature Reading:	ing: U. W	S (E	890-3048 Chain of Custody	stody	Zn Acetate+NaOH: Zn
otal Containers:		Corrected Temperature:	ature: 14, 4		. ,	-	NaOH+Ascorbic Acid: SAPC
Sample Identification	ication Matrix	Date Time Sampled Sampled	ne Depth Grab/	CHLOR	BTEX (Sample Comments
SS05	S	9/23/2022 /000	0 6" Grab	1 ×	×		Incident ID:
					34-52		Napp2223832773
				1			Cost Center:
			\				1081061001
		\					
\							
Total 200.7 / 6010	200.8 / 6020:	8RCRA	13PPM Texas 11	1 Al Sb As Ba Be	B Cd Ca Cr Co Cu Fe Pb	Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Ti Sn ∪ V	iO ₂ Na Sr Ti Sn U V Zn
Method(s) and	Circle Method(s) and Metal(s) to be analyzed		TCLP / SPLP 6010: 8RCRA		Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	Ni Se Ag TI U Hg:	Hg: 1631 / 245.1 / 7470 / 7471
no de la constanta de la const							

Sampler's Name:

Xenco Environment Testing

Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

City, State ZIP: Ca	Carlsbad, NM 88220	20		City, State ZIP:	_	Carlsbad, NM 88220	o N M	88220		eporting, revering to	ever all promotor	Reporting: Level III Level III Formore International
Phone: 98	989-854-0852		Email: t	Email: bbelill@ensolum.com	im.com				0	Deliverables: EDD L	J ADaPT □	Other:
Project Name:	PLU Pierce Canyon 17	anyon 17	Turn /	Turn Around					ANALYSIS REQUEST	ST		Preservative Codes
Project Number:	03E1558116	8116	☑ Routine	Rush	Pres. Code		_				None: NO	: NO DI Water: H ₂ O
Project Location:	32.12442, -103.89635	03.89635	Due Date:								Cool: Cool	<u>~</u>
Sampler's Name:	Meredith Roberts	Roberts	TAT starts the	TAT starts the day received by			_				HCL: HC	
PO#:)	the lab, if rece	the lab, if received by 4:30pm	rs						H ₂ SU ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	k: (Yes No	Wet Ice:	No No	nete	.0)					H ₃ PO	H ₃ PO ₄ : HP
Samples Received Intact:	#: XYes No	Thermometer ID:	er ID:	7750	arar	300					NaHS	NaHSO ₄ : NABIS
Cooler Custody Seals:	Yes No /	Correction Factor:	Factor:	RO~	Pa	PA:					Na ₂ S ₂	Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	Yes No	N/A Temperature Reading:	e Reading:	9.4		6 (E			890-3049 Chain of Custody	tody	Zn Ac	Zn Acetate+NaOH: Zn
Total Containers:		Corrected 7	Corrected Temperature:	4:17		IDE		B021			NaOt	NaOH+Ascorbic Acid: SAPC
Sample Identification		Matrix Date Sampled	Time Sampled	Depth Comp	# of Cont	CHLOR	TPH (80	BTEX (Sample Comments
SS04		S 9/23/2022	0955	6" Grab	1	×	×	×			Incid	Incident ID:
							-	アンとい			Napp	Napp2223832773
						1					Cost	Cost Center:
				1								1081061001
	\											
								+				
\												
\						_	-					
Total 200.7 / 6010	200.8 / 6020:		8RCRA 13PPM	M Texas 11	≥	Sb As	Ва Ве	ВС	Ca Cr Co Cu Fe Pb Mo	Mg Mn Mo Ni K Se Ag	e Ag SiO ₂ Na Sr	SiO ₂ Na Sr TI Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	Metal(s) to be a	nalyzed	TCLP / SF	TCLP / SPLP 6010: 8RCRA		Sb As	Ba E	e Cd C	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni	Ni Se Ag TI U	Hg: 1631 / 245.1 / 7470 / 7471	1 / 7470 / 7471
votice: Signature of this docu of service. Eurofins Xenco w	ument and relinquish iil be liable only for th	ment of samples co ne cost of samples a rill be applied to eac	nstitutes a valid pu ind shall not assur	ırchase order from me any responsibi arge of \$5 for each	client co lity for an	ompany t y losses submitte	o Eurofi or expe	ns Xenco, i nses incun ofins Xenc	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.	ssigns standard terms a ue to circumstances bey l be enforced unless prev	nd conditions bnd the control lously negotlated.	
Relinquished by: (Signature)	Signature)	Receive	Received by: (Signature	ure)		Date/Time	ime		Relinquished by: (Signature)) Receive	Received by: (Signature)	Date/Time
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5								0				

Sam Sam Sam Sam Sam

Address: Company Name: Project Manager:

3122 National Parks Hwy

Ensolum Ben Belill

Bill to: (if different) Company Name: Address:

Garrett Green

Carlsbad, NM 88220

Reporting: Level II Level III PST/UST TRRP Level IV

Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐

Work Order Comments

www.xenco.com

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State of Project:

3104 E. Green St. XTO Energy

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3048-1 SDG Number: 03E1558116

List Source: Eurofins Carlsbad

List Number: 1

Login Number: 3048

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3048-1 SDG Number: 03E1558116

Login Number: 3048 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/27/22 10:56 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3049-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

JURAMER

Authorized for release by: 10/7/2022 9:42:58 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

This report has been electronically signed and authorized by the signatory. Electronic

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

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Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3049-1
SDG: 03E1558116

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Certification Summary	14
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Sample Summary	16
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Definitions/Glossary

Job ID: 890-3049-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Qualifiers

GC VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier Qualifier Description

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 Colony Forming Unit CFU **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) Limit of Quantitation (DoD/DOE) LOQ

MCL EPA recommended "Maximum Contaminant Level" MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit MLMinimum Level (Dioxin) MPN Most Probable Number Method Quantitation Limit MQL

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

Toxicity Equivalent Factor (Dioxin) TFF Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum Job ID: 890-3049-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Job ID: 890-3049-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3049-1

Receipt

The sample was received on 9/23/2022 3:47 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA

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

GC Semi VOA

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

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

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3049-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS04 Lab Sample ID: 890-3049-1

Date Collected: 09/23/22 09:55 Date Received: 09/23/22 15:47

Sample Depth: 6'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/05/22 16:50	10/07/22 09:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	118		70 - 130			10/05/22 16:50	10/07/22 09:13	1
1,4-Difluorobenzene (Surr)	100		70 - 130			10/05/22 16:50	10/07/22 09:13	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	0	0.00402	mg/Kg			10/07/22 10:10	
Total BTEX	0.00.02	Ü	0.00402	mg/ng			10/01/22 10:10	
: Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Method: SW846 8015 NM - Diese Analyte	el Range Organ Result	ics (DRO) (C	GC)	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
• •	el Range Organ	ics (DRO) (C	GC)		<u>D</u>	Prepared		Dil Fac
Method: SW846 8015 NM - Diese Analyte	Result <49.9	ics (DRO) (Country of the Country of	RL 49.9	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.9 sel Range Organ	ics (DRO) (Country of the Country of	RL 49.9	Unit	<u>D</u>	Prepared Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	el Range Organ Result <49.9 sel Range Organ	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	Unit mg/Kg			Analyzed 09/28/22 09:31	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	el Range Organ Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U u U	RL 49.9 (GC)	Unit mg/Kg		Prepared	Analyzed 09/28/22 09:31 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result 49.9 sel Range Orga Result 49.9	cos (DRO) (On Qualifier Unics (DRO) Qualifier Unics (DRO) Qualifier U	(GC) RL 49.9 (BC) RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/27/22 11:47	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result 49.9 sel Range Orga Result 49.9 49.9	cos (DRO) (On Qualifier Unics (DRO) Qualifier Unics (DRO) Qualifier Unics Unic	(GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/27/22 11:47 09/27/22 11:47	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03 09/28/22 04:03	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result 49.9 sel Range Orga Result 49.9 49.9	cos (DRO) (On Qualifier Unics (DRO) Qualifier Unics (DRO) Qualifier Unics Unic	GC) RL 49.9 (GC) RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/27/22 11:47 09/27/22 11:47	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03 09/28/22 04:03	Dil Face 1 1 1 Dil Face
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 %Recovery	cos (DRO) (On Qualifier Unics (DRO) Qualifier Unics (DRO) Qualifier Unics Unic	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/27/22 11:47 09/27/22 11:47 09/27/22 11:47 Prepared	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03 09/28/22 04:03 09/28/22 04:03 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 %Recovery 103 114	Company of the compan	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/27/22 11:47 09/27/22 11:47 09/27/22 11:47 Prepared 09/27/22 11:47	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03 09/28/22 04:03 Analyzed 09/28/22 04:03	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 **Recovery 103 114 s, Ion Chromato	Company of the compan	GC) RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/27/22 11:47 09/27/22 11:47 09/27/22 11:47 Prepared 09/27/22 11:47	Analyzed 09/28/22 09:31 Analyzed 09/28/22 04:03 09/28/22 04:03 Analyzed 09/28/22 04:03	Dil Fac

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Surrogate Summary

Client: Ensolum Job ID: 890-3049-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

•				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19973-A-30-C MS	Matrix Spike	118	98	
880-19973-A-30-D MSD	Matrix Spike Duplicate	123	104	
890-3049-1	SS04	118	100	
LCS 880-36205/1-A	Lab Control Sample	116	101	
LCSD 880-36205/2-A	Lab Control Sample Dup	116	100	
MB 880-36205/5-A	Method Blank	104	111	
Surrogate Legend				
BFB = 4-Bromofluorobenzen	e (Surr)			
DFBZ = 1,4-Difluorobenzene	e (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)	
880-19602-A-1-C MS	Matrix Spike	75	76	
880-19602-A-1-D MSD	Matrix Spike Duplicate	81	82	
890-3049-1	SS04	103	114	
LCS 880-35514/2-A	Lab Control Sample	95	99	
LCSD 880-35514/3-A	Lab Control Sample Dup	106	109	
MB 880-35514/1-A	Method Blank	97	108	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3049-1 SDG: 03E1558116 Project/Site: PLU Pierce Canyon 17

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36205/5-A

Matrix: Solid Analysis Batch: 36228 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36205

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:50	10/07/22 00:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:50	10/07/22 00:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:50	10/07/22 00:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/05/22 16:50	10/07/22 00:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:50	10/07/22 00:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/05/22 16:50	10/07/22 00:47	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	104		70 - 130	10/05/22 16:50	10/07/22 00:47	1
1,4-Difluorobenzene (Surr)	111		70 - 130	10/05/22 16:50	10/07/22 00:47	1

Lab Sample ID: LCS 880-36205/1-A

Matrix: Solid

Analysis Batch: 36228

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36205

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09650	-	mg/Kg		97	70 - 130	
Toluene	0.100	0.1058		mg/Kg		106	70 - 130	
Ethylbenzene	0.100	0.1078		mg/Kg		108	70 - 130	
m-Xylene & p-Xylene	0.200	0.2206		mg/Kg		110	70 - 130	
o-Xylene	0.100	0.1097		mg/Kg		110	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCSD 880-36205/2-A

Matrix: Solid

Analysis Batch: 36228

Prep Type: Total/NA

Prep Batch: 36205

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08661		mg/Kg		87	70 - 130	11	35
Toluene	0.100	0.09946		mg/Kg		99	70 - 130	6	35
Ethylbenzene	0.100	0.1020		mg/Kg		102	70 - 130	6	35
m-Xylene & p-Xylene	0.200	0.2107		mg/Kg		105	70 - 130	5	35
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130	3	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-19973-A-30-C MS

Matrix: Solid

Analysis Batch: 36228

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

Prep Batch: 36205

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0998	0.09044		mg/Kg		91	70 - 130	
Toluene	<0.00201	U	0.0998	0.09994		mg/Kg		100	70 - 130	

QC Sample Results

Job ID: 890-3049-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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

Lab Sample ID: 880-19973-A-30-C MS

Lab Sample ID: 880-19973-A-30-D MSD

Matrix: Solid

Matrix: Solid

Analysis Batch: 36228

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 36205

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00201 U 0.0998 0.1003 101 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00402 U 0.200 0.2023 mg/Kg 101 70 - 130 0.0998 o-Xylene <0.00201 U 0.1013 70 - 130 mg/Kg 102

MS MS

Surrogate	%Recovery Qual	ifier Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 36205

RPD

Analysis Batch: 36228 Sample Sample Spike MSD MSD Result Qualifier RPD Limit Analyte babbA Result Qualifier %Rec Limits Unit Benzene <0.00201 U 0.0990 0.09503 mg/Kg 96 70 - 130 5 35 Toluene <0.00201 U 0.0990 0.1018 mg/Kg 103 70 - 130 2 35 Ethylbenzene <0.00201 U 0.0990 0.1033 104 70 - 130 3 35 mg/Kg 0.198 35 m-Xylene & p-Xylene <0.00402 U 0.2088 mg/Kg 105 70 - 130 3 0.0990 <0.00201 U 0.1047 70 - 130 o-Xylene mg/Kg 106 3

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	123		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

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

Lab Sample ID: MB 880-35514/1-A

Matrix: Solid

Analysis Batch: 35460

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

Prep Batch: 35514

мв мв Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte 50.0 09/27/22 11:47 09/27/22 20:58 <50.0 U Gasoline Range Organics mg/Kg (GRO)-C6-C10 09/27/22 20:58 Diesel Range Organics (Over <50.0 U 50.0 09/27/22 11:47 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/27/22 11:47 09/27/22 20:58 mg/Kg

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	97		70 - 130	09/27/22 11:47	09/27/22 20:58	1
o-Terphenyl	108		70 - 130	09/27/22 11:47	09/27/22 20:58	1

Lab Sample ID: LCS 880-35514/2-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35514

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	828.1		mg/Kg		83	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	844.7		mg/Kg		84	70 - 130	
C10-C28)								

o-Terphenyl

C10-C28)

Client: Ensolum Job ID: 890-3049-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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

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LCSD LCSD

Lab Sample ID: LCS 880-35514/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35460 Prep Batch: 35514

 Surrogate
 %Recovery 1-Chlorooctane
 Qualifier 2-Chlorooctane
 Limits 7-Chlorooctane

Lab Sample ID: LCSD 880-35514/3-A Client Sample ID: Lab Control Sample Dup

70 - 130

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35460 Prep Batch: 35514

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 808.3 81 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 940.8 94 mg/Kg 70 - 13011 20 C10-C28)

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 106
 70 - 130

 o-Terphenyl
 109
 70 - 130

Lab Sample ID: 880-19602-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35460 Prep Batch: 35514

Sample Sample Spike MS MS %Rec

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

Gasoline Range Organics <50.0 U 998 957.9 mg/Kg 93 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 825.9 mg/Kg 81 70 - 130 C10-C28)

MS MS
Surrogate %Recovery Qualifier Limits

 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 75
 70 - 130

 o-Terphenyl
 76
 70 - 130

Lab Sample ID: 880-19602-A-1-D MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 35460 Prep Batch: 35514

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 999 Gasoline Range Organics <50.0 1018 99 70 - 130 6 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 892.8 mg/Kg 87 70 - 130 20

MSD MSD
Surrogate %Recovery Qualifier Limits

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 Surrogate
 %Recovery
 Qualifier
 Limits

 1-Chlorooctane
 81
 70 - 130

 o-Terphenyl
 82
 70 - 130

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QC Sample Results

Client: Ensolum Job ID: 890-3049-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35475/1-A

Matrix: Solid

Analysis Batch: 35532

Prep Type: Soluble MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 09/28/22 10:56

Lab Sample ID: LCS 880-35475/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 234.7 mg/Kg 94 90 - 110

Lab Sample ID: LCSD 880-35475/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 234.5 mg/Kg 90 - 110

Lab Sample ID: 890-3047-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35532

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 230 249 494.5 106 90 - 110 mg/Kg

Lab Sample ID: 890-3047-A-1-C MSD

Matrix: Solid

Released to Imaging: 2/3/2023 11:35:16 AM

Analysis Batch: 35532

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 230 465.1 mg/Kg 94 90 - 110 6 20

QC Association Summary

Job ID: 890-3049-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC VOA

Prep Batch: 36205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Total/NA	Solid	5035	
MB 880-36205/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36205/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36205/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19973-A-30-C MS	Matrix Spike	Total/NA	Solid	5035	
880-19973-A-30-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36228

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Total/NA	Solid	8021B	36205
MB 880-36205/5-A	Method Blank	Total/NA	Solid	8021B	36205
LCS 880-36205/1-A	Lab Control Sample	Total/NA	Solid	8021B	36205
LCSD 880-36205/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36205
880-19973-A-30-C MS	Matrix Spike	Total/NA	Solid	8021B	36205
880-19973-A-30-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36205

Analysis Batch: 36361

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35460

Lab Sample ID 890-3049-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 35514
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015B NM	35514
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35514
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35514
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35514
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35514

Prep Batch: 35514

Lab Sample ID 890-3049-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35475

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Soluble	Solid	DI Leach	
MB 880-35475/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

HPLC/IC (Continued)

Leach Batch: 35475 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3049-1	SS04	Soluble	Solid	300.0	35475
MB 880-35475/1-A	Method Blank	Soluble	Solid	300.0	35475
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	300.0	35475
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35475
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	35475
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35475

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Lab Chronicle

Client: Ensolum Job ID: 890-3049-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS04 Lab Sample ID: 890-3049-1 Date Collected: 09/23/22 09:55

Matrix: Solid

Date Received: 09/23/22 15:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	36205	10/05/22 16:50	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36228	10/07/22 09:13	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36361	10/07/22 10:10	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35574	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35514	09/27/22 11:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/28/22 04:03	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	35475	09/27/22 09:07	KS	EET MID
Soluble	Analysis	300.0		1			35532	09/28/22 13:33	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 Pierce Canyon 17
SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pi	rogram	Identification Number	Expiration Date
Texas	N	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report by	ut the laboratory is not cortifi	ed by the governing authority. This list ma	v include analytee fo
the agency does not of	• •	ut the laboratory is not certifi	ed by the governing additionty. This list the	ay iliciude allaiytes lo
0 ,	• •	Matrix	Analyte	ay include analytes to
the agency does not of	fer certification.	•	, , ,	ay include analytes to

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Method Summary

Job ID: 890-3049-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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	MCAWW	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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3049-1

SDG: 03E1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3049-1	SS04	Solid	09/23/22 09:55	09/23/22 15:47	6'

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Relinquished by: (Signature)

Received by: (Signature)

Ma3132

1-18/21

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Date: 08/25/2020 Rev. 2020 2

eurofins

Environment Testing

Chain of Custody

Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 EL Paso, TX (915) 585-3443, Lubbock, Houston

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roiect Manager:	Ben Belill				Bill to: (if different)	rent)	୍ଷ	Garrett Green	reen		Work Order Comments	Comments	
ompany Name:	Ensolum				Company Name:	me:	XT	XTO Energy	rgy		Program: UST/PST PRP Brov	PRP☐ Brownfields ☐ RRC ☐ Superfund ☐	
ddress:	3122 National Parks Hwy	arks H	¥		Address:		310	3104 E. Green St	reen		State of Project:]	
ity, State ZIP:	Carlsbad, NM 88220	8220			City, State ZIP:	ē	Ca	Carlsbad, NM 88220	NM 8	20	Reporting: Level II	ST/UST TRRP Level IVLI	
hone:	989-854-0852			Email:	Email: bbelill@ensolum.com	olum.	com				Deliverables: EDD	ADaPT Other:	
roject Name:	PLU Pierce Canvon 17	e Canv	on 17	Turn	Turn Around					ANALYSIS REQ	EQUEST	Preservative Codes	
roject Number:	03E1	03E1558116	0,	✓ Routine	Rush	Pres.	Pres.		\dashv			None: NO DI Water: H ₂ O	
roject Location:	32.12442, -103.89635	-103.8	9635	Due Date:								2	
ampler's Name:	Meredith Roberts	th Robe	irts	TAT starts th	TAT starts the day received by	by	-		-				
0#)	the lab, if rec	the lab, if received by 4:30pm	٠	13	-	-			H ₂ SU ₄ : H ₂ NaOH: Na	
AMPLE RECEIPT	PT Temp Blank:	lank:	Yes No	Wet Ice:	No See	nete						H ₃ PO ₄ : HP	
amples Received Intact:		8	Thermometer ID:	er ID:	TIMES	3		-				NaHSO4: NABIS	_
ooler Custody Seals:	ls: Yes No	1	Correction Factor:	actor:	~ 0.3	<u>V</u>						Nd20203. Nd3003	
ample Custody Seals:	als: Yes No	NA	Temperature Reading:	e Reading:	9.11	1	S /F	-, -		890-3049 Chain of C	of Custody	Zn Acetate+NaCn. Zn	
otal Containers:			Corrected Temperature:	emperature:	1111	#	SIDE					NaCH+Ascorbic Acid: SAFC	
Sample Identification	ntification	Matrix	Date Sampled	Time Sampled	Depth Comp	ab/ # of mp Cont	CHLO	TPH (8	BTEX			Sample Comments	_
SS04	4	S	9/23/2022	0955	6" Grab	ab	1	×	×			Incident ID:	
		,					-		75	3		Napp2223832773	
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Total 200.7 / 6010	010 200.8 / 6020:	020:		BRCRA 13F	13PPM Texas 11	11 /	Al Sb	As Ba	a Be	B Cd Ca Cr Co Cu Fe F	Mg Mn Mo Ni K Se Ag SiO ₂	g SiO ₂ Na Sr Tl Sn U V Zn Ha: 1631/245.1/7470 /7471	
ircle Method(s) and Metal(s) to be alialyzed	nd Metal(s) to be	e analy.	zeu	וטבדוס	ארבד סטוס.	97.07	د و	5	0	CET / STET BOILD GIVENN OR AS DE	9		
tice: Signature of this	document and relingu	Jishment or the cos	of samples con	stitutes a valid	purchase order t	from clie	or any l	pany to	Eurofin	yice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. **Service** Funding 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 a	yice: 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 service. Firefire 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		
Eurofins Xenco. A mi	nimum charge of \$85.0	00 will be	applied to each	project and a c	charge of \$5 for e	each sar	nple sut	mitted	to Euro	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. Insectients	rms will be emorced unless previously iregonated.	4.	

SAMPLE RECEIPT

Samples Received Intact:

Cooler Custody Seals:

Sampler's Name:

Project Location:

Project Number:

Project Name:

City, State ZIP:

Company Name: Project Manager:

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3049-1

SDG Number: 03E1558116

Login Number: 3049 List Source: Eurofins Carlsbad

List Number: 1 Creator: Stutzman, Amanda

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 True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. 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 True HTs) Sample containers have legible labels. True Containers are not broken or leaking. True Sample collection date/times are provided. True Appropriate sample containers are used. True Sample bottles are completely filled. True Sample Preservation Verified. N/A There is sufficient vol. for all requested analyses, incl. any requested True MS/MSDs Containers requiring zero headspace have no headspace or bubble is N/A

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<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3049-1 SDG Number: 03E1558116

Login Number: 3049 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/27/22 10:56 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3050-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

MAMER

Authorized for release by: 10/5/2022 11:37:44 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 2/3/2023 11:35:16 AM

signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

This report has been electronically signed and authorized by the signatory. Electronic

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

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Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3050-1
SDG: 03E1558116

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Definitions/Glossary

Job ID: 890-3050-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Qualifiers

GC VOA Qualifier

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

GC Semi VOA

Qualifier	Qualifier Description
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.
п	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)

Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample

LOQ	
MCL	
MDA	
MDO	

DLC

EDL

LOD

DL, RA, RE, IN

Limit of Quantitation (DoD/DOE) EPA recommended "Maximum Contaminant Level" Minimum Detectable Activity (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Minimum Detectable Concentration (Radiochemistry) MDC MDL Method Detection Limit 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)

Decision Level Concentration (Radiochemistry)

NEG Negative / Absent POS Positive / Present PQL Practical Quantitation Limit

Presumptive **PRES** 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) Toxicity Equivalent Quotient (Dioxin) **TEQ**

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3050-1

SDG: 03E1558116

Job ID: 890-3050-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3050-1

Receipt

The sample was received on 9/23/2022 3:47 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 4.4°C

GC VOA

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-36062 and analytical batch 880-36055 recovered outside control limits for the following analytes: Benzene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-36062 and analytical batch 880-36055 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: Surrogate recovery for the following sample was outside control limits: (LCS 880-36062/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-3122-A-1-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: SS03 (890-3050-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

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

HPLC/IC

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

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3050-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS03 Lab Sample ID: 890-3050-1 Date Collected: 09/23/22 09:50 Date Received: 09/23/22 15:47

Sample Depth: 6'

Chloride

	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+	0.00200	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
Ethylbenzene	<0.00200	U *+	0.00200	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
m-Xylene & p-Xylene	<0.00399	U *+	0.00399	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
o-Xylene	<0.00200	U *+	0.00200	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
Xylenes, Total	<0.00399	U *+	0.00399	mg/Kg		10/04/22 13:56	10/05/22 01:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130			10/04/22 13:56	10/05/22 01:37	1
1,4-Difluorobenzene (Surr)	85		70 - 130			10/04/22 13:56	10/05/22 01:37	1
Method: TAL SOP Total BTEX -	Total BTEX Cale	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/05/22 12:21	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	A malumad	D:: F
				•	U	riepaieu	Analyzed	DII Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/28/22 09:31	1
- -			49.9		=	riepaieu		1 Dil Fac
Total TPH : Method: SW846 8015B NM - Die Analyte	sel Range Orga		49.9		<u>D</u>	Prepared		1
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics	sel Range Orga	nics (DRO) Qualifier	49.9 (GC)	mg/Kg	_ =	<u> </u>	09/28/22 09:31	1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	esel Range Orga Result	Qualifier	49.9 (GC)	mg/Kg	_ =	Prepared	09/28/22 09:31 Analyzed	Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9	unics (DRO) Qualifier U	(GC) RL 49.9	mg/Kg Unit mg/Kg	_ =	Prepared 09/27/22 11:47	09/28/22 09:31 Analyzed 09/28/22 04:24	Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U	(GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/27/22 11:47	09/28/22 09:31 Analyzed 09/28/22 04:24 09/28/22 04:24	1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U	49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/27/22 11:47 09/27/22 11:47	09/28/22 09:31 Analyzed 09/28/22 04:24 09/28/22 04:24 09/28/22 04:24	Dil Face 1 1 1 Dil Face
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 %Recovery	Qualifier U	49.9 (GC) RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/27/22 11:47 09/27/22 11:47 09/27/22 11:47 Prepared	09/28/22 09:31 Analyzed 09/28/22 04:24 09/28/22 04:24 09/28/22 04:24 Analyzed	Dil Fac 1 1 Dil Fac
Method: SW846 8015B NM - Die Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	See Range Orga Result	Qualifier U Qualifier	49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/27/22 11:47 09/27/22 11:47 09/27/22 11:47 Prepared 09/27/22 11:47	09/28/22 09:31 Analyzed 09/28/22 04:24 09/28/22 04:24 Analyzed 09/28/22 04:24	1 1 Dil Fac

4.96

80.6

mg/Kg

Eurofins Carlsbad

09/28/22 13:52

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Ensolum Job ID: 890-3050-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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)	
890-3050-1	SS03	140 S1+	85	
890-3122-A-1-C MS	Matrix Spike	135 S1+	97	
890-3122-A-1-D MSD	Matrix Spike Duplicate	124	91	
LCS 880-36062/1-A	Lab Control Sample	138 S1+	104	
LCSD 880-36062/2-A	Lab Control Sample Dup	120	94	
MB 880-36062/5-A	Method Blank	86	88	
Surrogate Legend				

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)	
880-19602-A-1-C MS	Matrix Spike	75	76	
880-19602-A-1-D MSD	Matrix Spike Duplicate	81	82	
890-3050-1	SS03	112	121	
LCS 880-35514/2-A	Lab Control Sample	95	99	
LCSD 880-35514/3-A	Lab Control Sample Dup	106	109	
MB 880-35514/1-A	Method Blank	97	108	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

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Client: Ensolum Job ID: 890-3050-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36062/5-A

Lab Sample ID: LCS 880-36062/1-A

Matrix: Solid

Analysis Batch: 36055

Matrix: Solid Analysis Batch: 36055 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36062

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:56	10/04/22 16:01	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:56	10/04/22 16:01	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:56	10/04/22 16:01	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/22 13:56	10/04/22 16:01	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/22 13:56	10/04/22 16:01	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		10/04/22 13:56	10/04/22 16:01	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prep	pared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130	10/04/2	22 13:56	10/04/22 16:01	1
1,4-Difluorobenzene (Surr)	88		70 - 130	10/04/2	22 13:56	10/04/22 16:01	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36062

Prep Type: Total/NA

Prep Batch: 36062

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.1337 mg/Kg 134 70 - 130 Toluene 0.100 0.1188 mg/Kg 119 70 - 130 0.100 Ethylbenzene 0.1392 *+ mg/Kg 139 70 - 130 0.200 0.2792 *+ 70 - 130 m-Xylene & p-Xylene mg/Kg 140 0.100 70 - 130 o-Xylene 0.1441 *+ mg/Kg 144

LCS LCS

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	138	S1+	70 - 130	
1,4-Difluorobenzene (Surr)	104		70 - 130	

Lab Sample ID: LCSD 880-36062/2-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 36055

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1174	mg/Kg		117	70 - 130	13	35
Toluene	0.100	0.1208	mg/Kg		121	70 - 130	2	35
Ethylbenzene	0.100	0.1192	mg/Kg		119	70 - 130	15	35
m-Xylene & p-Xylene	0.200	0.2376	mg/Kg		119	70 - 130	16	35
o-Xylene	0.100	0.1201	mg/Kg		120	70 - 130	18	35

LCSD LCSD

Surrogate	%Recovery Q	ualifier	Limits
4-Bromofluorobenzene (Surr)	120		70 - 130
1 4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-3122-A-1-C MS

Matrix: Solid

Analysis Batch: 36055

Client San	nple ID: Matrix Spike
	Prep Type: Total/NA

Prep Batch: 36062

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00198	U F1 *+	0.0998	0.1312	F1	mg/Kg		131	70 - 130	
Toluene	<0.00198	U F1	0.0998	0.1402	F1	mg/Kg		140	70 - 130	

QC Sample Results

Job ID: 890-3050-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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

Lab Sample ID: 890-3122-A-1-C MS

Analysis Batch: 36055

Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 36062

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 0.1398 F1 <0.00198 U F1 *+ 0.0998 140 70 - 130 Ethylbenzene mg/Kg 0.2793 F1 m-Xylene & p-Xylene <0.00396 U F1 *+ 0.200 mg/Kg 140 70 - 130 <0.00198 U F1 *+ 0.0998 0.1352 F1 70 - 130 o-Xylene mg/Kg 136

MS MS Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 135 1,4-Difluorobenzene (Surr) 70 - 130 97

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 36062

Analysis Batch: 36055

Matrix: Solid

Lab Sample ID: 890-3122-A-1-D MSD

Sample Sample Spike MSD MSD RPD RPD Limit Result Qualifier babbA Result Qualifier %Rec Limits Analyte Unit Benzene <0.00198 U F1 *+ 0.0996 0.1158 mg/Kg 116 70 - 130 12 35 Toluene <0.00198 UF1 0.0996 0.1192 mg/Kg 120 70 - 130 16 35 U F1 *+ 0.0996 0.1180 119 70 - 130 17 35 Ethylbenzene <0.00198 mg/Kg m-Xylene & p-Xylene <0.00396 U F1 *+ 0.199 0.2364 mg/Kg 119 70 - 130 17 35 70 - 130 0.0996 o-Xylene <0.00198 U.F1*+ 0.1185 mg/Kg 119 13 35

MSD MSD Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 124 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 91

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

Lab Sample ID: MB 880-35514/1-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 35514

мв мв Result Qualifier RL Unit D Dil Fac Analyte Prepared Analyzed <50.0 U 50.0 09/27/22 11:47 09/27/22 20:58 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 09/27/22 11:47 09/27/22 20:58 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/27/22 20:58 mg/Kg 09/27/22 11:47

MB MB

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 1-Chlorooctane 97 70 - 130 09/27/22 11:47 09/27/22 20:58 108 70 - 130 09/27/22 11:47 09/27/22 20:58 o-Terphenyl

Lab Sample ID: LCS 880-35514/2-A

Matrix: Solid

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

Analysis Batch: 35460 Prep Batch: 35514

	Spike	LUS	LUS				/onec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	828.1		mg/Kg		83	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	844.7		mg/Kg		84	70 - 130
C10-C28)							

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3050-1

SDG: 03E1558116

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

LCS LCS

%Recovery Qualifier

Lab Sample ID: LCS 880-35514/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Surrogate

C10-C28)

Client: Ensolum

Analysis Batch: 35460

Prep Type: Total/NA

Prep Batch: 35514

1-Chlorooctane 95 70 - 130 o-Terphenyl 99 70 - 130

Lab Sample ID: LCSD 880-35514/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Limits

Prep Type: Total/NA Analysis Batch: 35460 Prep Batch: 35514

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 808.3 81 70 - 1302 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 940.8 94 mg/Kg 70 - 13011 20

LCSD LCSD

Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 106 109 70 - 130 o-Terphenyl

Lab Sample ID: 880-19602-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA **Analysis Batch: 35460** Prep Batch: 35514 Sample Sample MS MS Spike

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U 998 957.9 mg/Kg 93 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 998 825.9 mg/Kg 81 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 75 o-Terphenyl 76 70 - 130

Lab Sample ID: 880-19602-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 35460 Sample Sample MSD MSD Spike %Rec

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 999 Gasoline Range Organics <50.0 1018 99 70 - 130 6 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 892.8 mg/Kg 87 70 - 130 20 C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits

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1-Chlorooctane 81 70 - 130 82 70 - 130 o-Terphenyl

Eurofins Carlsbad

Prep Batch: 35514 RPD

QC Sample Results

Client: Ensolum Job ID: 890-3050-1 Project/Site: PLU Pierce Canyon 17

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

SDG: 03E1558116

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35475/1-A

Matrix: Solid

Analysis Batch: 35532

MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 09/28/22 10:56

Lab Sample ID: LCS 880-35475/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

Spike LCS LCS %Rec Added %Rec Analyte Result Qualifier Unit D Limits Chloride 250 234.7 mg/Kg 94 90 - 110

Lab Sample ID: LCSD 880-35475/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35532

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 234.5 mg/Kg 90 - 110

Lab Sample ID: 890-3047-A-1-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35532

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 230 249 494.5 106 90 - 110 mg/Kg

Lab Sample ID: 890-3047-A-1-C MSD

Matrix: Solid

Analysis Batch: 35532

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 230 465.1 mg/Kg 94 90 - 110 6 20

QC Association Summary

Client: Ensolum Job ID: 890-3050-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC VOA

Analysis Batch: 36055

Lab Sample ID 890-3050-1	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8021B	Prep Batch 36062
MB 880-36062/5-A	Method Blank	Total/NA	Solid	8021B	36062
LCS 880-36062/1-A	Lab Control Sample	Total/NA	Solid	8021B	36062
LCSD 880-36062/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36062
890-3122-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	36062
890-3122-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36062

Prep Batch: 36062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Total/NA	Solid	5035	<u> </u>
MB 880-36062/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36062/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36062/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3122-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3122-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35460

Lab Sample ID 890-3050-1	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 35514
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015B NM	35514
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35514
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35514
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35514
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35514

Prep Batch: 35514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Total/NA	Solid	8015NM Prep	
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35575

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35475

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Soluble	Solid	DI Leach	<u> </u>
MB 880-35475/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
SDG: 03E1558116

HPLC/IC (Continued)

Leach Batch: 35475 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
l	890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3050-1	SS03	Soluble	Solid	300.0	35475
MB 880-35475/1-A	Method Blank	Soluble	Solid	300.0	35475
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	300.0	35475
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35475
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	35475
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35475

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Date Received: 09/23/22 15:47

Lab Chronicle

Client: Ensolum Job ID: 890-3050-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS03 Lab Sample ID: 890-3050-1 Date Collected: 09/23/22 09:50

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	36062	10/04/22 13:56	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36055	10/05/22 01:37	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36180	10/05/22 12:21	SM	EET MID
Total/NA	Analysis	8015 NM		1			35575	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35514	09/27/22 11:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/28/22 04:24	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	35475	09/27/22 09:07	KS	EET MID
Soluble	Analysis	300.0		1			35532	09/28/22 13:52	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 Job ID: 890-3050-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pr	rogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-22-24	06-30-23
The following analytes the agency does not of		ut the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	
Total BTEX		Solid	Total BTEX	

Method Summary

Job ID: 890-3050-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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	MCAWW	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

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3050-1

SDG: 03E1558116

	011 (0 1 15	••			
Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3050-1	SS03	Solid	09/23/22 09:50	09/23/22 15:47	6'

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Refinquishe

Phone:

City, State ZIP:

Carlsbad, NM 88220 3122 National Parks Hwy

City, State ZIP:

Carlsbad, NM 88220 3104 E. Green St. XTO Energy Garrett Green

Level IV

State of Project:

Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐

Work Order Comments

으

\ddress:

Project Manager:

Bill to: (if different)

Company Name:

Company Name:

Ensolum Ben Belill

Chain of Custody

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

Environment Testing

Phone:	989-854-0852	Ema	Email: bbelill@ensolum.com	n.com					Deliverables: EDD	ADaPT Other:	
Project Name:	PLU Pierce Canyon 17		Turn Around					ANALYSIS REQUEST	JEST	Preservative Codes	
Project Number:	03E1558116	☑ Routine	Rush	Pres. Code						None: NO DI Water: H ₂ O	
Project Location:	32.12442, -103.89635	35 Due Date:								Coal: Coal MeOH: Me	
Sampler's Name:	Meredith Roberts		TAT starts the day received by			Ц				HCL: HC HNO3: HN	
PO #:		the lab, if	the lab, if received by 4:30pm	rs						H ₂ S0 ₄ : H ₂ NaOH: Na	
SAMPLE RECEIPT	Temp Blank:	Yes No Wet Ice:	No sex	nete	.0)					H ₃ PO ₄ : HP	
Samples Received Intact:	No sex	Thermometer ID:	Thurson	ran	300.					NaHSO ₄ : NABIS	19
Cooler Custody Seals:	Yes No MA	Correction Factor:	600	Pa	PA:					Na ₂ S ₂ O ₃ : NaSO ₃	of ·
Sample Custody Seals:	Yes No (MA Temperature Reading:	9.4		S (E			890-3050 Chain of	of Custody	Zn Acetate+NaOH: Zn	7
Total Containers:	Con	Corrected Temperature:	7.7		IDE)15)	B021		Con and the second seco	NaOH+Ascorbic Acid: SAPC	ie 1
Sample Identification	Matrix	Date Time Sampled Sampled	Depth Grab/ # of Comp Cont	of Cont	CHLOR	TPH (8	BTEX (Sample Comments	Pag
SSO3	S	9/23/2022 09 50	6" Grab		×	×	×			Incident ID:	
							3	1		Napp2223832773	
				\	1	_				Cost Center:	
										1081061001	
		\	1								
		1									4.7.
											11
					_						
Total 200.7 / 6010	0 200.8 / 6020:	8RCRA 1	8RCRA 13PPM Texas 11 Al Sb As Ba Be	<u>A</u> S	b As	ВаЕ		B Cd Ca Cr Co Cu Fe Pb N	Mg Mn Mo Ni K Se Ag SiO ₂ Na	g SiO ₂ Na Sr Tl Sn U V Zn	
Circle Method(s) and	Circle Method(s) and Metal(s) to be analyzed	TCLP /	TCLP / SPLP 6010: 8RCRA		Sb As	Ba	Ве	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni	Ni Se Ag TI U H	Hg: 1631 / 245.1 / 7470 / 7471	10.
lotice: Signature of this do	ocument and relinquishment of sar	mples constitutes a val	ld purchase order from	client co	mpany	to Euro	fins Xe	votice: 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	 It assigns standard terms and conditions are due to circumstances beyond the control 	onditions	
f Eurofins Xenco. A minir	num charge of \$85.00 will be appli	ed to each project and	a charge of \$5 for each	sample :	submitte	d to Eu	rofins	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.	ill be enforced unless previously	y negotiated.	
Refinquished by: (Signature)		Received by: (Signature)	nature)		Date/Time	Time		Relinquished by: (Signature)	e) Received by: (Signature)	r: (Signature) Date/Time	

Revised Date: 08/25/2020 Rev. 2020

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3050-1

SDG Number: 03E1558116

Login Number: 3050 List Source: Eurofins Carlsbad

List Number: 1 Creator: Stutzman, Amanda

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 True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. 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 True HTs) Sample containers have legible labels. True Containers are not broken or leaking. True Sample collection date/times are provided. True Appropriate sample containers are used. True Sample bottles are completely filled. True Sample Preservation Verified. N/A There is sufficient vol. for all requested analyses, incl. any requested True MS/MSDs

N/A

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<6mm (1/4").

Containers requiring zero headspace have no headspace or bubble is

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3050-1 SDG Number: 03E1558116

Login Number: 3050 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/27/22 10:56 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3051-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 10/7/2022 9:47:58 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

····· Links ······ **Review your project** results through EOL **Have a Question?**

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 2/3/2023 11:35:16 AM This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten

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

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3051-1
SDG: 03E1558116

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Definitions/Glossary

Job ID: 890-3051-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

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**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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

DFR 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

Decision Level Concentration (Radiochemistry) DLC

EDL Estimated Detection Limit (Dioxin) LOD Limit of Detection (DoD/DOE) LOQ Limit of Quantitation (DoD/DOE)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit MDL 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

Toxicity Equivalent Factor (Dioxin) TEF Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

Job ID: 890-3051-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3051-1

Receipt

The samples were received on 9/23/2022 3:47 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 4.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-36073 and analytical batch 880-36225 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: Surrogate recovery for the following samples were outside control limits: (880-19602-A-1-G) and (880-19602-A-1-E MS). 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.

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Ensolum Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS01

Sa

Client Sample ID: SS01	Lab Sample ID: 890-3051-1
Date Collected: 09/23/22 09:40	Matrix: Solid
Date Received: 09/23/22 15:47	
Sample Depth: 6'	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		10/04/22 16:09	10/07/22 02:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			10/04/22 16:09	10/07/22 02:27	1
1,4-Difluorobenzene (Surr)	78		70 - 130			10/04/22 16:09	10/07/22 02:27	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			10/07/22 10:22	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	4940		49.9	mg/Kg			09/28/22 09:31	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/27/22 11:47	09/28/22 05:28	1
(GRO)-C6-C10								
Diesel Range Organics (Over	4290		49.9	mg/Kg		09/27/22 11:47	09/28/22 05:28	1
C10-C28)								
Oll Range Organics (Over C28-C36)	654		49.9	mg/Kg		09/27/22 11:47	09/28/22 05:28	1
Surrogato	% Pacayary	O	Limite			Propared	Analyzod	Dil Ess

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	102		70 - 130	09/27/22 11:47	09/28/22 05:28	1
	o-Terphenyl	108		70 - 130	09/27/22 11:47	09/28/22 05:28	1
í	<u> </u>						

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride 5.03 09/28/22 13:58 216 mg/Kg

Client Sample ID: SS02 Lab Sample ID: 890-3051-2 Date Collected: 09/23/22 09:45

Date Received: 09/23/22 15:47

Sample Depth: 6'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/04/22 16:09	10/07/22 02:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/04/22 16:09	10/07/22 02:48	

Eurofins Carlsbad

Matrix: Solid

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3051-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS02 Lab Sample ID: 890-3051-2

Date Collected: 09/23/22 09:45 Date Received: 09/23/22 15:47

Sample Depth: 6'

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	100		70 - 130			10/04/22 16:09	10/07/22 02:48	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/07/22 10:22	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1320		49.9	mg/Kg			09/28/22 09:31	1
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/27/22 11:47	09/28/22 05:49	1
Diesel Range Organics (Over	1110		49.9	mg/Kg		09/27/22 11:47	09/28/22 05:49	1
C10-C28)				3. 3				
Oll Range Organics (Over C28-C36)	212		49.9	mg/Kg		09/27/22 11:47	09/28/22 05:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			09/27/22 11:47	09/28/22 05:49	1
o-Terphenyl	94		70 - 130			09/27/22 11:47	09/28/22 05:49	1
<u> </u>	lan Ohnamata	anambu. C	alubla					
Method: MCAWW 300.0 - Anions	. Ion Unromato	orabny - S	olubie					

5.01

mg/Kg

213

09/28/22 14:04

Surrogate Summary

Client: Ensolum Job ID: 890-3051-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19602-A-1-E MS	Matrix Spike	38 S1-	75	
880-19602-A-1-F MSD	Matrix Spike Duplicate	102	95	
890-3051-1	SS01	93	78	
890-3051-2	SS02	112	100	
LCS 880-36073/1-A	Lab Control Sample	91	100	
LCSD 880-36073/2-A	Lab Control Sample Dup	85	94	
MB 880-36073/5-A	Method Blank	98	85	
MB 880-36203/5-A	Method Blank	97	82	

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)	
880-19602-A-1-C MS	Matrix Spike	75	76	
380-19602-A-1-D MSD	Matrix Spike Duplicate	81	82	
890-3051-1	SS01	102	108	
390-3051-2	SS02	90	94	
_CS 880-35514/2-A	Lab Control Sample	95	99	
LCSD 880-35514/3-A	Lab Control Sample Dup	106	109	
MB 880-35514/1-A	Method Blank	97	108	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36073/5-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36073

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/04/22 16:09	10/06/22 21:35	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/04/22 16:09	10/06/22 21:35	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepare	d Anal	lyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	10/04/22 1	5:09 10/06/2	22 21:35	1
1,4-Difluorobenzene (Surr)	85		70 - 130	10/04/22 1	6:09 10/06/2	22 21:35	1

Lab Sample ID: LCS 880-36073/1-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 36073

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09262 mg/Kg 93 70 - 130 Toluene 0.100 0.09281 mg/Kg 93 70 - 130 0.100 0.08488 85 Ethylbenzene mg/Kg 70 - 130 0.200 0.1805 90 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09406 70 - 130 o-Xylene mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: LCSD 880-36073/2-A

Matrix: Solid

Analysis Batch: 36225

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 36073

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1015		mg/Kg		102	70 - 130	9	35
Toluene	0.100	0.1014		mg/Kg		101	70 - 130	9	35
Ethylbenzene	0.100	0.09329		mg/Kg		93	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1918		mg/Kg		96	70 - 130	6	35
o-Xylene	0.100	0.09782		mg/Kg		98	70 - 130	4	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1.4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 880-19602-A-1-E MS

Matrix: Solid

Analysis Batch: 36225

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

Prep Batch: 36073

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F2 F1	0.100	0.005462	F1	mg/Kg	_	5	70 - 130	
Toluene	< 0.00201	U F2 F1	0.100	0.008924	F1	mg/Kg		9	70 - 130	

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 36073

QC Sample Results

Client: Ensolum Job ID: 890-3051-1 SDG: 03E1558116 Project/Site: PLU Pierce Canyon 17

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

Lab Sample ID: 880-19602-A-1-E MS

Analysis Batch: 36225

Matrix: Solid

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00201	U F2 F1	0.100	0.006284	F1	mg/Kg		6	70 - 130
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.200	0.01043	F1	mg/Kg		5	70 - 130
o-Xylene	<0.00201	U F2 F1	0.100	0.006099	F1	mg/Kg		6	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	38	S1-	70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

Lab Sample ID: 880-19602-A-1-F MSD

Matrix: Solid Analysis Batch: 36225									•	Type: Tot Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F2 F1	0.0990	0.04086	F1 F2	mg/Kg		41	70 - 130	153	35
Toluene	<0.00201	U F2 F1	0.0990	0.05172	F1 F2	mg/Kg		52	70 - 130	141	35
Ethylbenzene	<0.00201	U F2 F1	0.0990	0.05451	F1 F2	mg/Kg		55	70 - 130	159	35
m-Xylene & p-Xylene	<0.00402	U F2 F1	0.198	0.1184	F1 F2	mg/Kg		60	70 - 130	168	35
o-Xylene	< 0.00201	U F2 F1	0.0990	0.06192	F1 F2	mg/Kg		63	70 - 130	164	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: MB 880-36203/5-A

Matrix: Solid

Analysis Batch: 36225							Prep Batch	n: 36203
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:37	10/06/22 10:14	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/05/22 16:37	10/06/22 10:14	1

	MB	МВ					
Xylenes, Total	<0.00400	U	0.00400	mg/Kg	10/05/22 16:37	10/06/22 10:14	1
o-Xylene	<0.00200	U	0.00200	mg/Kg	10/05/22 16:37	10/06/22 10:14	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg	10/05/22 16:37	10/06/22 10:14	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg	10/05/22 16:37	10/06/22 10:14	1
Toluene	<0.00200	U	0.00200	mg/Kg	10/05/22 16:37	10/06/22 10:14	1
DONEONO	-0.00200	J	0.00200	mg/rtg	10/00/22 10:01	10/00/22 10:11	•

	IVID	INID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	10/05/22 16:37	10/06/22 10:14	1
1,4-Difluorobenzene (Surr)	82		70 - 130	10/05/22 16:37	10/06/22 10:14	1

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

Lab Sample ID: MB 880-35514/1-A

Matrix: Solid

Analysis Batch: 35460

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 35514

	MB MB	ЛВ								
Analyte	Result Qualifie	er RL	Unit	D	Prepared	Analyzed	Dil Fac			
Gasoline Range Organics	<50.0 U	50.0	mg/Kg		09/27/22 11:47	09/27/22 20:58	1			
(GRO)-C6-C10										

QC Sample Results

Client: Ensolum Job ID: 890-3051-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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

Lab Sample ID: MB 880-35514/1-A Matrix: Solid

Lab Sample ID: LCS 880-35514/2-A

Analysis Batch: 35460

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 35514

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/27/22 11:47	09/27/22 20:58	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/27/22 11:47	09/27/22 20:58	1

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	97		70 - 130	09/27/22 11:47	09/27/22 20:58	1
l	o-Terphenyl	108		70 - 130	09/27/22 11:47	09/27/22 20:58	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35514

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 828.1 mg/Kg 83 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 844.7 70 - 130 mg/Kg 84 C10-C28)

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	95	70 - 130
o-Terphenyl	99	70 - 130

Lab Sample ID: LCSD 880-35514/3-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 35460

Analysis Batch: 35460

Client Sample ID: Lal	Control Sample Dup
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Prep Type: Total/NA

Prep Batch: 35514

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	808.3		mg/Kg		81	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	940.8		mg/Kg		94	70 - 130	11	20	
C10-C28)										

C10-C28)

LCSD LCSD

Surrogate	%Recovery Qual	ifier Limits
1-Chlorooctane	106	70 - 130
o-Terphenyl	109	70 - 130

Lab Sample ID: 880-19602-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 35460

Prep Type: Total/NA

Prep Batch: 35514

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	998	957.9		mg/Kg		93	70 - 130	
Diesel Range Organics (Over	<50.0	U	998	825.9		mg/Kg		81	70 - 130	

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	75		70 - 130
o-Terphenyl	76		70 - 130

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QC Sample Results

Client: Ensolum Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

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

Lab Sample ID: 880-19602-A-1 Matrix: Solid Analysis Batch: 35460	-D MSD					C	lient Sa	ample ID	•	oike Dup Type: Tot Batch:	tal/NA
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	1018		mg/Kg		99	70 - 130	6	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	892.8		mg/Kg		87	70 - 130	8	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	81		70 - 130
o-Terphenyl	82		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35475/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Soluble
Analysis Batch: 35532	

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/28/22 10:56	1

Lab Sample ID: LCS 880-35475/2-A	Client Sample ID: Lab Control Sample
Matrix: Solid	Prep Type: Soluble
Analysis Batch: 35532	

	Spike	LCS	LCS			%Rec
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits
Chloride	250	234.7	mg/Kg		94	90 - 110

Lab Sample ID: LCSD 880-35475/3-A	Client Sample ID: Lab Control Sample Dup
Matrix: Solid	Pren Type: Soluble
I Matrix: Solid	Pred Type, Soluble

Analysis Batch: 35532

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	234.5		mg/Kg	_	94	90 - 110	0	20	

Lab S	Sample ID: 890-3047-A-1-B MS	Client Sample ID: Matrix Spike
Matrix	x: Solid	Prep Type: Soluble

Analysis Batch: 35532

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	230		249	494.5		ma/Ka		106	90 - 110	

Chloride	230	249	494.5	mg/Kg	106	90 - 110	
Lab Sample ID: 890-3047-A-1-C MSD				Client S	Sample ID	: Matrix Spike Duplic	ate

Matrix: Solid Analysis Batch: 35532

Analysis Batch. 00002												
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	230		249	465.1		ma/Ka		94	90 - 110	6	20	

Eurofins Carlsbad

Prep Type: Soluble

Released to Imaging: 2/3/2023 11:35:16 AM

QC Association Summary

Client: Ensolum Job ID: 890-3051-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC VOA

Prep Batch: 36073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	5035	
890-3051-2	SS02	Total/NA	Solid	5035	
MB 880-36073/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36073/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36073/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19602-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19602-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 36203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36203/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 36225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	8021B	36073
890-3051-2	SS02	Total/NA	Solid	8021B	36073
MB 880-36073/5-A	Method Blank	Total/NA	Solid	8021B	36073
MB 880-36203/5-A	Method Blank	Total/NA	Solid	8021B	36203
LCS 880-36073/1-A	Lab Control Sample	Total/NA	Solid	8021B	36073
LCSD 880-36073/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36073
880-19602-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	36073
880-19602-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36073

Analysis Batch: 36371

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	Total BTEX	
890-3051-2	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35460

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	8015B NM	35514
890-3051-2	SS02	Total/NA	Solid	8015B NM	35514
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015B NM	35514
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35514
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35514
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35514
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35514

Prep Batch: 35514

Released to Imaging: 2/3/2023 11:35:16 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	8015NM Prep	
890-3051-2	SS02	Total/NA	Solid	8015NM Prep	
MB 880-35514/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35514/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35514/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19602-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19602-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Eurofins Carlsbad

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QC Association Summary

Client: Ensolum Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC Semi VOA

Analysis Batch: 35578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Total/NA	Solid	8015 NM	
890-3051-2	SS02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35475

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Soluble	Solid	DI Leach	
890-3051-2	SS02	Soluble	Solid	DI Leach	
MB 880-35475/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3051-1	SS01	Soluble	Solid	300.0	35475
890-3051-2	SS02	Soluble	Solid	300.0	35475
MB 880-35475/1-A	Method Blank	Soluble	Solid	300.0	35475
LCS 880-35475/2-A	Lab Control Sample	Soluble	Solid	300.0	35475
LCSD 880-35475/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35475
890-3047-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	35475
890-3047-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35475

Lab Chronicle

Client: Ensolum Job ID: 890-3051-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SS01

Lab Sample ID: 890-3051-1

Matrix: Solid

Date Collected: 09/23/22 09:40 Date Received: 09/23/22 15:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	36073	10/04/22 16:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36225	10/07/22 02:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36371	10/07/22 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35578	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35514	09/27/22 11:47	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/28/22 05:28	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	35475	09/27/22 09:07	KS	EET MID
Soluble	Analysis	300.0		1			35532	09/28/22 13:58	CH	EET MID

Client Sample ID: SS02 Lab Sample ID: 890-3051-2

Date Collected: 09/23/22 09:45 Matrix: Solid

Date Received: 09/23/22 15:47

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	36073	10/04/22 16:09	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36225	10/07/22 02:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36371	10/07/22 10:22	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35578	09/28/22 09:31	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35514	09/27/22 11:47	DM	EET MIC
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35460	09/28/22 05:49	SM	EET MIC
Soluble	Leach	DI Leach			4.99 g	50 mL	35475	09/27/22 09:07	KS	EET MIC
Soluble	Analysis	300.0		1			35532	09/28/22 14:04	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 Pierce Canyon 17

SDG: 03E1558116

Laboratory: Eurofins Midland

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

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

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

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

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Method Summary

Job ID: 890-3051-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

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	MCAWW	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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3051-1

SDG: 03E1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Dept
890-3051-1	SS01	Solid	09/23/22 09:40	09/23/22 15:47	6'
890-3051-2	SS02	Solid	09/23/22 09:45	09/23/22 15:47	6'

Relinquished by: (Signature)

Tronga

9/23/22 15N7

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020 2

Received by: (Signature)

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Environment Testing

Chain of Custody

Work Order No:

NEST Preservative Codes	ANALYSIS REQUEST	Turn Around	PLU Pierce Canyon 17	Project Name:
Deliverables: EDD		Email: bbelill@ensolum.com	989-854-0852	Phone:
9	Carlsbad, NM 88220	City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:
State of Project:	3104 E. Green St.	Address:	3122 National Parks Hwy	Address:
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	XTO Energy	Company Name:	Ensolum	Company Name:
Work Order Comments	Garrett Green	Bill to: (if different)	Ben Belill	Project Manager:

SAMPLE RECEIPT

Samples Received Intact:

Sampler's Name:

Project Location:

Project Number:

www.xenco.com Page of
Work Order Comments
ogram: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
ate of Project:
porting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV☐
liverables: EDD

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3051-1

SDG Number: 03E1558116

Login Number: 3051 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

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4.0

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3051-1

SDG Number: 03E1558116

List Source: Eurofins Midland List Creation: 09/27/22 10:56 AM

Creator: Rodriguez, Leticia

Login Number: 3051

List Number: 2

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

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4.0

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3104-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU PC 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

10/10/2022 10:11:03 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Authorized for release by:

Have a Question?

EOL

------ LINKS ------

Review your project results through

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 2/3/2023 11:35:16 AM signature is intended to be the legally binding equivalent of a traditionally handwritten

This report has been electronically signed and authorized by the signatory. Electronic

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

Client: Ensolum
Project/Site: PLU PC 17
Laboratory Job ID: 890-3104-1
SDG: 03E1558116

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Definitions/Glossary

Job ID: 890-3104-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

Qualifiers

GC VOA

Qualifier	Qualifier Description	
*_	LCS and/or LCSD is outside acceptance limits, low biased.	
*+	LCS and/or LCSD is outside acceptance limits, high biased.	
*1	LCS/LCSD RPD exceeds control limits.	

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

GC Semi VOA

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

HPLC/IC

Qualifier	Qualitier Description		
11	Indicates the analyte was analyzed for hist not do		

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)

EPA recommended "Maximum Contaminant Level" MCL MDA Minimum Detectable Activity (Radiochemistry) MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML MPN Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Negative / Absent NEG POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive **Quality Control** QC

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RI

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
 Job ID: 890-3104-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Job ID: 890-3104-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3104-1

Receipt

The samples were received on 9/29/2022 8:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4° C

GC VOA

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-36449 and analytical batch 880-36442 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene Due to a misinjection.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (LCS 880-36449/1-A). Evidence of matrix interferences is not obvious.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (890-3104-A-1-B MS) and (890-3104-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-35819 and analytical batch 880-35738 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35819 and analytical batch 880-35738 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

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Lab Sample ID: 890-3104-1

Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: PH01

Date Collected: 09/28/22 10:45 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
Toluene	<0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
Ethylbenzene	< 0.00199	U *- *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
m-Xylene & p-Xylene	<0.00398	U *- *1	0.00398	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
o-Xylene	< 0.00199	U *+ *1	0.00199	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/08/22 12:21	10/09/22 07:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			10/08/22 12:21	10/09/22 07:52	1
1,4-Difluorobenzene (Surr)	71		70 - 130			10/08/22 12:21	10/09/22 07:52	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/10/22 10:40	1
-								
Method: SW846 8015 NM - Diese Analyte	•	ics (DRO) (C	GC)	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
	•	, , ,	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/03/22 11:45	
Analyte	Result 662	Qualifier			<u>D</u>	Prepared		
Analyte Total TPH	Result 662	Qualifier	50.0 RL		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies	Result 662	Qualifier nics (DRO) Qualifier	RL 50.0	mg/Kg	_ =		10/03/22 11:45	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result 662 sel Range Orga Result	Qualifier nics (DRO) Qualifier U *1	RL 50.0	mg/Kg	_ =	Prepared	10/03/22 11:45 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 662 sel Range Orga Result <50.0	Qualifier nics (DRO) Qualifier U *1	RL	mg/Kg Unit mg/Kg	_ =	Prepared 09/30/22 14:01	10/03/22 11:45 Analyzed 09/30/22 20:15	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 662 sel Range Orga Result <50.0	Qualifier nics (DRO) Qualifier U *1	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/30/22 14:01 09/30/22 14:01	10/03/22 11:45 Analyzed 09/30/22 20:15 09/30/22 20:15	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 662 sel Range Orga Result < 50.0 563 99.4	Qualifier nics (DRO) Qualifier U*1 F1	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/30/22 14:01 09/30/22 14:01	Analyzed 09/30/22 20:15 09/30/22 20:15	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 662 sel Range Orga Result <50.0 563 99.4 %Recovery	Qualifier nics (DRO) Qualifier U*1 F1	RL	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared	Analyzed 09/30/22 20:15 09/30/22 20:15 09/30/22 20:15 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier nics (DRO) Qualifier U*1 F1 Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	Analyzed 09/30/22 20:15 09/30/22 20:15 Analyzed 09/30/22 20:15	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier nics (DRO) Qualifier U*1 F1 Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	_ =	Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	Analyzed 09/30/22 20:15 09/30/22 20:15 Analyzed 09/30/22 20:15	1 1 1 Dil Fac

Client Sample ID: PH02

Date Collected: 09/28/22 10:15

Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *- *1	0.00201	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
Toluene	<0.00201	U *- *1	0.00201	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
Ethylbenzene	<0.00201	U *- *1	0.00201	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
m-Xylene & p-Xylene	<0.00402	U *- *1	0.00402	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
o-Xylene	<0.00201	U *+ *1	0.00201	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/08/22 12:21	10/09/22 08:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/08/22 12:21	10/09/22 08:13	

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Lab Sample ID: 890-3104-2

Released to Imaging: 2/3/2023 11:35:16 AM

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: PH02 Lab Sample ID: 890-3104-2 Date Collected: 09/28/22 10:15

Matrix: Solid

Date Received: 09/29/22 08:36 Sample Depth: 1

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	73	70 - 130	10/08/22 12:21	10/09/22 08:13	1

Mathad: TAI	COD Total DTEV	Total DTCV	Calaulatian
Wethod: IAL	SOP Total BTEX	- IOIAI DIEA	Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	mg/Kg			10/10/22 10:40	1

Mothodi CWOAC OOAE NM	Discal Bong	o Organica	(DBO) (CCV
Method: SW846 8015 NM	- Diesei Rang	e Organics	(DKU) ('	G ()

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			10/03/22 11:45	1

Method: SW846 8015B NM - Diesel Range Or	ganics (DRO)	(GC)
Michiga Offoro Colod Min - Dieser Range Of	garries (Dito)	(00)

moundar criticity of the process	tungo o. ga		,,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		09/30/22 14:01	09/30/22 21:19	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/30/22 14:01	09/30/22 21:19	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/30/22 14:01	09/30/22 21:19	1
	a							

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83	70 - 130	09/30/22 14:01	09/30/22 21:19	1
o-Terphenyl	85	70 - 130	09/30/22 14:01	09/30/22 21:19	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifie		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61.6	4.97	mg/Kg			10/06/22 01:37	1

Surrogate Summary

 Client: Ensolum
 Job ID: 890-3104-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

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)	
890-3089-A-1-F MS	Matrix Spike	106	91	
890-3089-A-1-G MSD	Matrix Spike Duplicate	96	81	
890-3104-1	PH01	82	71	
390-3104-2	PH02	77	73	
_CS 880-36449/1-A	Lab Control Sample	171 S1+	117	
_CSD 880-36449/2-A	Lab Control Sample Dup	98	94	
MB 880-36293/5-A	Method Blank	83	92	
MB 880-36449/5-A	Method Blank	87	87	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3104-1	PH01	77	73
890-3104-1 MS	PH01	69 S1-	61 S1-
890-3104-1 MSD	PH01	71	61 S1-
890-3104-2	PH02	83	85
LCS 880-35819/2-A	Lab Control Sample	106	110
LCSD 880-35819/3-A	Lab Control Sample Dup	94	98
MB 880-35819/1-A	Method Blank	108	116

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36293/5-A

Matrix: Solid

Analysis Batch: 36442

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36293

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:51	10/08/22 15:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/06/22 15:51	10/08/22 15:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:51	10/08/22 15:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/06/22 15:51	10/08/22 15:47	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130	10/06/22 15	5:51 10/08/22 15:47	1
1,4-Difluorobenzene (Surr)	92		70 - 130	10/06/22 15	5:51 10/08/22 15:47	1

Lab Sample ID: MB 880-36449/5-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Prep Batch: 36449 **Analysis Batch: 36442**

MR MR

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 10/08/22 12:21 10/09/22 02:23 Toluene <0.00200 U 0.00200 mg/Kg 10/08/22 12:21 10/09/22 02:23 10/09/22 02:23 Ethylbenzene <0.00200 U 0.00200 mg/Kg 10/08/22 12:21 10/08/22 12:21 10/09/22 02:23 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg <0.00200 U 0.00200 10/08/22 12:21 10/09/22 02:23 o-Xylene mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 10/08/22 12:21 10/09/22 02:23

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130	10/08/22 12:21	10/09/22 02:23	1
1,4-Difluorobenzene (Surr)	87		70 - 130	10/08/22 12:21	10/09/22 02:23	1

Lab Sample ID: LCS 880-36449/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 36442

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.01884	*_	mg/Kg		19	70 - 130	
Toluene	0.100	0.01832	*-	mg/Kg		18	70 - 130	
Ethylbenzene	0.100	0.02039	*_	mg/Kg		20	70 - 130	
m-Xylene & p-Xylene	0.200	0.05373	*_	mg/Kg		27	70 - 130	
o-Xylene	0.100	0.3177	*+	mg/Kg		318	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130
1.4-Difluorobenzene (Surr)	117		70 - 130

Lab Sample ID: LCSD 880-36449/2-A

Matrix: Solid

Analysis Batch: 36442						Prep Batch: 36449			
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09908	*1	mg/Kg		99	70 - 130	136	35

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample Dup

Prep Batch: 36449

QC Sample Results

Client: Ensolum Job ID: 890-3104-1 SDG: 03E1558116 Project/Site: PLU PC 17

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

Lab Sample ID: LCSD 880-36449/2-A **Matrix: Solid**

Analysis Batch: 36442

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 36449

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.08768	*1	mg/Kg		88	70 - 130	131	35
Ethylbenzene	0.100	0.08396	*1	mg/Kg		84	70 - 130	122	35
m-Xylene & p-Xylene	0.200	0.1727	*1	mg/Kg		86	70 - 130	105	35
o-Xylene	0.100	0.09883	*1	mg/Kg		99	70 - 130	105	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	98		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-3089-A-1-F MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 36442

Prep Type: Total/NA

Prep Batch: 36449

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U *- *1 F1	0.0998	0.04456	F1	mg/Kg		45	70 - 130	
Toluene	<0.00202	U *- *1 F1	0.0998	0.04470	F1	mg/Kg		45	70 - 130	
Ethylbenzene	<0.00202	U *- *1 F1	0.0998	0.04470	F1	mg/Kg		45	70 - 130	
m-Xylene & p-Xylene	<0.00403	U *- *1 F1	0.200	0.07327	F1	mg/Kg		37	70 - 130	
o-Xylene	<0.00202	U *+ *1 F1	0.0998	0.04861	F1	mg/Kg		49	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	106	70 - 130
1,4-Difluorobenzene (Surr)	91	70 - 130

Lab Sample ID: 890-3089-A-1-G MSD

Matrix: Solid Analysis Batch: 36442 Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prep Batch: 36449

Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00202	U *- *1 F1	0.101	0.03882	F1	mg/Kg		39	70 - 130	14	35
<0.00202	U *- *1 F1	0.101	0.04506	F1	mg/Kg		45	70 - 130	1	35
<0.00202	U *- *1 F1	0.101	0.04374	F1	mg/Kg		43	70 - 130	2	35
<0.00403	U *- *1 F1	0.201	0.06634	F1	mg/Kg		33	70 - 130	10	35
<0.00202	U *+ *1 F1	0.101	0.04504	F1	mg/Kg		45	70 - 130	8	35
	Result <0.00202 <0.00202 <0.00202 <0.00202 <0.00403	Sample Result Qualifier	Result Qualifier Added <0.00202	Result Qualifier Added Result <0.00202	Result Qualifier Added Result Qualifier <0.00202	Result Qualifier Added Result Qualifier Unit <0.00202	Result Qualifier Added Result Qualifier Unit D <0.00202	Result Qualifier Added Result Qualifier Unit D %Rec <0.00202	Result Qualifier Added Result Qualifier Unit D %Rec Limits <0.00202	Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD <0.00202

MSD MSD

Surrogate	%Recovery	Quaimer	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

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

Lab Sample ID: MB 880-35819/1-A

Matrix: Solid

Analysis Batch: 35738

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

Prep Batch: 35819

мв мв Result Qualifier Unit Prepared <50.0 U 50.0 mg/Kg 09/30/22 14:01 09/30/22 19:10 Gasoline Range Organics (GRO)-C6-C10

 Client: Ensolum
 Job ID: 890-3104-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

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

Lab Sample ID: MB 880-35819/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 35738	Prep Batch: 35819

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/30/22 14:01	09/30/22 19:10	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/22 14:01	09/30/22 19:10	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130			09/30/22 14:01	09/30/22 19:10	1
o-Terphenyl	116		70 - 130			09/30/22 14:01	09/30/22 19:10	1

Lab Sample ID: LCS 880-35819	9/2-A						Client	Sample	ID: Lab Cont	rol Sample
Matrix: Solid									Prep Typ	e: Total/NA
Analysis Batch: 35738									Prep Ba	itch: 35819
			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics			1000	1130		mg/Kg		113	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over			1000	983.8		mg/Kg		98	70 - 130	
C10-C28)										
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	106		70 - 130							

70 - 130

Lab Sample ID: LCSD 880-35819/3-A					it Sam	iple ID:	Lab Contro	ıl Sampl	e Dup
Matrix: Solid							Prep 1	Type: To	tal/NA
Analysis Batch: 35738							Prep	Batch:	35819
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	805.1	*1	mg/Kg		81	70 - 130	34	20
Diesel Range Organics (Over C10-C28)	1000	871.5		mg/Kg		87	70 - 130	12	20
	Analysis Batch: 35738 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Matrix: Solid Analysis Batch: 35738 Spike Analyte Added Gasoline Range Organics 1000 (GRO)-C6-C10 1000 Diesel Range Organics (Over 1000	Matrix: Solid Analysis Batch: 35738 Spike LCSD Analyte Added Result Gasoline Range Organics 1000 805.1 (GRO)-C6-C10 1000 871.5 Diesel Range Organics (Over 1000 871.5	Matrix: Solid Analysis Batch: 35738 Spike LCSD LCSD Analyte Added Result Qualifier Gasoline Range Organics (GRO)-C6-C10 1000 805.1 *1 Diesel Range Organics (Over 1000 871.5 **1	Matrix: Solid Analysis Batch: 35738 Spike LCSD LCSD Analyte Added Result Qualifier Unit Gasoline Range Organics (GRO)-C6-C10 1000 805.1 *1 mg/Kg Diesel Range Organics (Over 1000 871.5 mg/Kg	Matrix: Solid Analysis Batch: 35738 Spike LCSD LCSD Analyte Added Result Qualifier Unit Displayed D Gasoline Range Organics (GRO)-C6-C10 1000 805.1 *1 mg/Kg Diesel Range Organics (Over 1000 871.5 mg/Kg	Matrix: Solid Analysis Batch: 35738 Spike LCSD LCSD Analyte Added Result Qualifier Unit Unit D %Rec Gasoline Range Organics (GRO)-C6-C10 1000 805.1 *1 mg/Kg 81 Diesel Range Organics (Over 1000 871.5 mg/Kg 87 87	Matrix: Solid Prep 1 Analysis Batch: 35738 Spike LCSD LCSD LCSD KRec KRec MRec Analyte Analyte Analyte Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 805.1 *1 mg/Kg 81 70 - 130 (GRO)-C6-C10 Colspan="3">Diesel Range Organics (Over 1000 871.5 mg/Kg 87 70 - 130	Matrix: Solid Prep Type: To Prep Batch: To

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	98		70 - 130

110

69 S1-

61 S1-

Lab Sample ID: 890-3104-1 MS Matrix: Solid Analysis Batch: 35738									Prep Ba	le ID: PH01 e: Total/NA atch: 35819
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	887.3		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	563	F1	998	954.4	F1	mg/Kg		39	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							

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70 - 130

70 - 130

1-Chlorooctane

o-Terphenyl

o-Terphenyl

Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

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

Lab Sample ID: 890-3104-1 MSD **Client Sample ID: PH01 Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35738 Prep Batch: 35819 Comple Comple Med Med

	Sample	Sample	Spike	IVIOD	IVIOD				70Rec		KFD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U *1	999	976.8		mg/Kg		96	70 - 130	10	20
(GRO)-C6-C10											
Diesel Range Organics (Over	563	F1	999	983.3	F1	mg/Kg		42	70 - 130	3	20
C10-C28)											

MSD MSD

	Surrogate	%Recovery	Qualifier	Limits
	1-Chlorooctane	71		70 - 130
Į	o-Terphenyl	61	S1-	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36004/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36198

мв мв Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/06/22 01:02

Lab Sample ID: LCS 880-36004/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36198

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	257.6	·	mg/Kg		103	90 - 110	

Lab Sample ID: LCSD 880-36004/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36198

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	248.5		mg/Kg		99	90 - 110	4	20	

Lab Sample ID: 890-3104-1 MS **Client Sample ID: PH01 Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36198

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	81.0		250	312 0		ma/Ka		92	90 110	

Lab Sample ID: 890-3104-1 MSD **Client Sample ID: PH01 Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36198

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	81.9		250	326.2		mg/Kg		98	90 - 110	4	20

Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

GC VOA

Prep Batch: 36293

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36293/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 36442

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	8021B	36449
890-3104-2	PH02	Total/NA	Solid	8021B	36449
MB 880-36293/5-A	Method Blank	Total/NA	Solid	8021B	36293
MB 880-36449/5-A	Method Blank	Total/NA	Solid	8021B	36449
LCS 880-36449/1-A	Lab Control Sample	Total/NA	Solid	8021B	36449
LCSD 880-36449/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36449
890-3089-A-1-F MS	Matrix Spike	Total/NA	Solid	8021B	36449
890-3089-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36449

Prep Batch: 36449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	5035	
890-3104-2	PH02	Total/NA	Solid	5035	
MB 880-36449/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36449/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36449/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3089-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-3089-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	Total BTEX	
890-3104-2	PH02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	8015B NM	35819
890-3104-2	PH02	Total/NA	Solid	8015B NM	35819
MB 880-35819/1-A	Method Blank	Total/NA	Solid	8015B NM	35819
LCS 880-35819/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35819
LCSD 880-35819/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35819
890-3104-1 MS	PH01	Total/NA	Solid	8015B NM	35819
890-3104-1 MSD	PH01	Total/NA	Solid	8015B NM	35819

Prep Batch: 35819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	8015NM Prep	
890-3104-2	PH02	Total/NA	Solid	8015NM Prep	
MB 880-35819/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35819/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35819/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3104-1 MS	PH01	Total/NA	Solid	8015NM Prep	
890-3104-1 MSD	PH01	Total/NA	Solid	8015NM Prep	

 Client: Ensolum
 Job ID: 890-3104-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

GC Semi VOA

Analysis Batch: 35979

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Total/NA	Solid	8015 NM	
890-3104-2	PH02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 36004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Soluble	Solid	DI Leach	
890-3104-2	PH02	Soluble	Solid	DI Leach	
MB 880-36004/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36004/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36004/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3104-1 MS	PH01	Soluble	Solid	DI Leach	
890-3104-1 MSD	PH01	Soluble	Solid	DI Leach	

Analysis Batch: 36198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3104-1	PH01	Soluble	Solid	300.0	36004
890-3104-2	PH02	Soluble	Solid	300.0	36004
MB 880-36004/1-A	Method Blank	Soluble	Solid	300.0	36004
LCS 880-36004/2-A	Lab Control Sample	Soluble	Solid	300.0	36004
LCSD 880-36004/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36004
890-3104-1 MS	PH01	Soluble	Solid	300.0	36004
890-3104-1 MSD	PH01	Soluble	Solid	300.0	36004

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Client: Ensolum Job ID: 890-3104-1 Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: PH01 Lab Sample ID: 890-3104-1

Date Collected: 09/28/22 10:45 **Matrix: Solid** Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	36449	10/08/22 12:21	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36442	10/09/22 07:52	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36560	10/10/22 10:40	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35979	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 20:15	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36004	10/03/22 14:30	KS	EET MID
Soluble	Analysis	300.0		1			36198	10/06/22 01:20	CH	EET MID

Client Sample ID: PH02 Lab Sample ID: 890-3104-2

Date Collected: 09/28/22 10:15 **Matrix: Solid** Date Received: 09/29/22 08:36

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 Total/NA Prep 4.97 g 5 mL 36449 10/08/22 12:21 MNR EET MID Total/NA 8021B 5 mL 10/09/22 08:13 **EET MID** Analysis 1 5 mL 36442 AJ Total/NA Total BTEX 36560 10/10/22 10:40 Analysis 1 A.I **EET MID** Total/NA Analysis 8015 NM 35979 10/03/22 11:45 SM **EET MID** 35819 Total/NA Prep 8015NM Prep 10.04 g 10 mL 09/30/22 14:01 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 35738 09/30/22 21:19 SM **EET MID** 10/03/22 14:30 Soluble 5.03 g Leach DI Leach 50 mL 36004 KS **EET MID** Soluble Analysis 300.0 36198 10/06/22 01:37 СН **EET MID**

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3104-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, but	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes fo
the agency does not of	• •	it the laboratory is not certific	su by the governing authority. This list his	ay include analytes to
,	• •	Matrix	Analyte	ay include analytes to
the agency does not of	fer certification.	,	, , ,	ay illoude allalytes lo

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Method Summary

Job ID: 890-3104-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

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	MCAWW	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

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU PC 17

Job ID: 890-3104-1

SDG: 03E1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	D
890-3104-1	PH01	Solid	09/28/22 10:45	09/29/22 08:36	1
890-3104-2	PH02	Solid	09/28/22 10:15	09/29/22 08:36	1

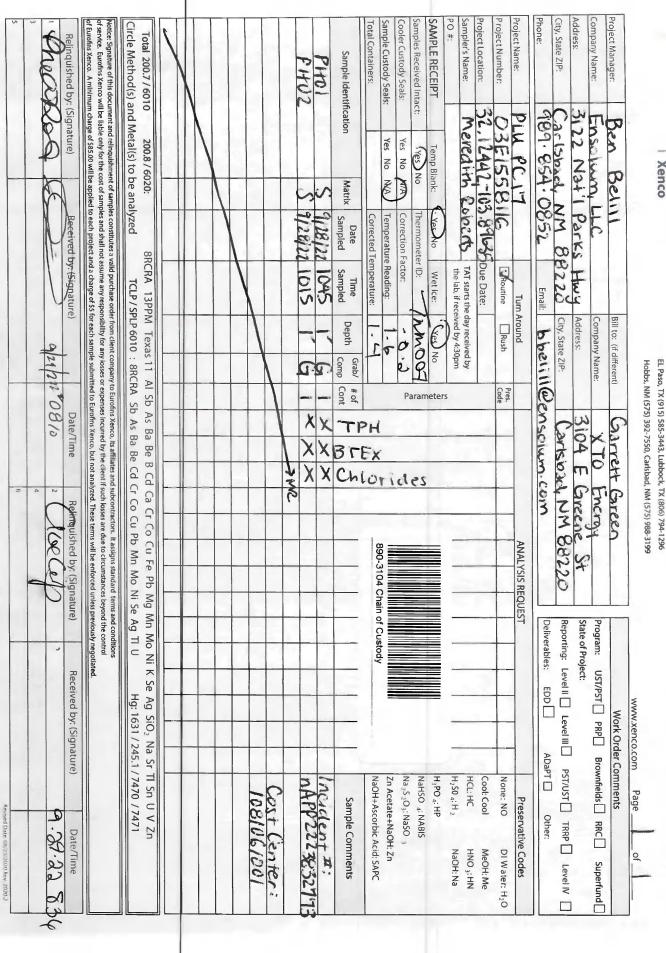
eurofins

Environment Testing

Chain of Custody

Midland, TX (432 Houston, TX (;

						A C C.C. ST
Superfund	RRC	nfields	Brown	Program: UST/PST PRP Brownfields RRC Superfund	Program:	VTO FACE
		nments	der Con	Work Order Comments		Garrett Green
of	-	Page_	.com	www.xenco.com Page of		
						'5) 392-7550, Carlsbad, NM (575) 988-3199
						5) 585-3443, Lubbock, TX (806) 794-1296
			No:	Work Order No:) 704-5440, San Antonio, TX (210) 509-3334
						281) 240-4200, Dallas, IX (214) 902-0300



Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3104-1 SDG Number: 03E1558116

Login Number: 3104 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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	
ls the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3104-1 SDG Number: 03E1558116

Login Number: 3104 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/30/22 10:28 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



ANALYTICAL REPORT

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

Laboratory Job ID: 890-3105-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU PC 17

For:

eurofins 🔆

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill



Authorized for release by: 10/11/2022 1:33:14 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

LINKS

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

Client: Ensolum
Project/Site: PLU PC 17
Laboratory Job ID: 890-3105-1
SDG: 03E1558116

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Definitions/Glossary

Client: Ensolum Job ID: 890-3105-1 Project/Site: PLU PC 17 SDG: 03E1558116

Qualifiers

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Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
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 V	ΩΔ

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

HPLC/IC

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

Glossarv

Ciossaiy	
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

Not Detected at the reporting limit (or MDL or EDL if shown) ND

Negative / Absent NEG POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive **Quality Control** QC

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 PC 17 Job ID: 890-3105-1

SDG: 03E1558116

Job ID: 890-3105-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3105-1

Receipt

The samples were received on 9/29/2022 8:36 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36450 and analytical batch 880-36624 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS02 (890-3105-2) and FS03 (890-3105-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: o-Xylene biased high in LCSD. Since only an acceptable LCS is required per the method, the data has been qualified and reported.(LCSD 880-36450/2-A)

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: (890-3104-A-1-B MS) and (890-3104-A-1-C MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-35819 and analytical batch 880-35738 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35819 and analytical batch 880-35738 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-35811 and analytical batch 880-36008 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.

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

Job ID: 890-3105-1

Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: FS01 Lab Sample ID: 890-3105-1 Date Collected: 09/28/22 16:15

Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U F1 F2	0.00202	mg/Kg		10/08/22 13:26	10/11/22 11:26	-
Toluene	<0.00202	U F1 F2	0.00202	mg/Kg		10/08/22 13:26	10/11/22 11:26	
Ethylbenzene	<0.00202	U F1 F2	0.00202	mg/Kg		10/08/22 13:26	10/11/22 11:26	
m-Xylene & p-Xylene	<0.00403	U F1 F2	0.00403	mg/Kg		10/08/22 13:26	10/11/22 11:26	
o-Xylene	<0.00202	U *+ F1 F2	0.00202	mg/Kg		10/08/22 13:26	10/11/22 11:26	
Xylenes, Total	<0.00403	U F1 F2	0.00403	mg/Kg		10/08/22 13:26	10/11/22 11:26	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	77		70 - 130			10/08/22 13:26	10/11/22 11:26	
1,4-Difluorobenzene (Surr)	85		70 - 130			10/08/22 13:26	10/11/22 11:26	
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00403	U	0.00403	mg/Kg			10/11/22 12:45	
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (C	SC)					
Method: SW846 8015 NM - Diese Analyte Total TPH	•	Qualifier	RL 49.9		<u>D</u>	Prepared	Analyzed 10/03/22 11:45	
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9 sel Range Orga	Qualifier U	RL 49.9	mg/Kg		<u> </u>	10/03/22 11:45	
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.9 sel Range Orga	Qualifier Unics (DRO) Qualifier	RL 49.9		<u>D</u>	Prepared 09/30/22 14:01		Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga Result	Qualifier Unics (DRO) Qualifier	RL 49.9	mg/Kg		Prepared	10/03/22 11:45 Analyzed	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U *1	RL 49.9	mg/Kg		Prepared	10/03/22 11:45 Analyzed	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U *1	(GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/30/22 14:01	10/03/22 11:45 Analyzed 09/30/22 22:03	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U nics (DRO) Qualifier U *1 U	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01	10/03/22 11:45 Analyzed 09/30/22 22:03 09/30/22 22:03	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U nics (DRO) Qualifier U *1 U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01	Analyzed 09/30/22 22:03 09/30/22 22:03	Dil Fa
Analyte	Result <49.9	Qualifier U nics (DRO) Qualifier U *1 U	RL 49.9 (GC) RL 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared	Analyzed 09/30/22 22:03 09/30/22 22:03 Analyzed	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U nics (DRO) Qualifier U *1 U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	Analyzed 09/30/22 22:03 09/30/22 22:03 Analyzed 09/30/22 22:03	Dil Fa
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U nics (DRO) Qualifier U *1 U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	Analyzed 09/30/22 22:03 09/30/22 22:03 Analyzed 09/30/22 22:03	Dil Fa

Client Sample ID: FS02 Lab Sample ID: 890-3105-2

Date Collected: 09/28/22 15:45 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
o-Xylene	<0.00200	U *+	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 12:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	57	S1-	70 - 130			10/08/22 13:26	10/11/22 12:07	1

Eurofins Carlsbad

Matrix: Solid

Lab Sample ID: 890-3105-2

Job ID: 890-3105-1

Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: FS02

Date Collected: 09/28/22 15:45 Date Received: 09/29/22 08:36

Sample Depth: 1

Method: SW846 8021B - Volatile Or	ganic Compounds	(GC)	(Continued)
modification of the court of th	gaine compounds		(Continuou)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	100	70 - 130	10/08/22 13:26	10/11/22 12:07	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/11/22 12:45	1

Mathada OMO40 0045 NM Disasi Damas Omenica (DDO) (OO	Α.
Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC	. 1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	105	50.0	mg/Kg			10/03/22 11:45	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 *1	50.0	mg/Kg		09/30/22 14:01	09/30/22 22:24	1
Diesel Range Organics (Over C10-C28)	105		50.0	mg/Kg		09/30/22 14:01	09/30/22 22:24	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/22 14:01	09/30/22 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	92	70 - 130	09/30/22 14:01	09/30/22 22:24	1
o-Terphenyl	93	70 - 130	09/30/22 14:01	09/30/22 22:24	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	339		5.01	mg/Kg			10/04/22 05:20	1

Client Sample ID: FS03 Lab Sample ID: 890-3105-3

Date Collected: 09/28/22 16:20 Date Received: 09/29/22 08:36

Sample Depth: 1

l				
Method: SW	846 8021B	- Volatile Orga	anic Compound	s (GC)

mothod. Offoro COLID Tolat	no Organio Goinp	ounas (SS)	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
o-Xylene	<0.00198	U *+	0.00198	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/08/22 13:26	10/11/22 12:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	52	S1-	70 - 130			10/08/22 13:26	10/11/22 12:27	1
1.4 Diffuorobenzene (Surr)	105		70 130			10/08/22 12:26	10/11/22 12:27	1

1,4-Difluorobenzene (Surr)	105	70 - 130	10/08/22 13:26	10/11/22 12:27

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/11/22 12:45	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/03/22 11:45	1

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Matrix: Solid

Lab Sample ID: 890-3105-3

10/06/22 01:43

Lab Sample ID: 890-3105-4

Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3105-1 Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: FS03

Date Collected: 09/28/22 16:20 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U *1	50.0	mg/Kg		09/30/22 14:01	09/30/22 22:45	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/30/22 14:01	09/30/22 22:45	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/30/22 14:01	09/30/22 22:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			09/30/22 14:01	09/30/22 22:45	1
o-Terphenyl	94		70 - 130			09/30/22 14:01	09/30/22 22:45	1
Method: MCAWW 300.0 - Anions	. Ion Chromato	ography - Se	oluble					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

4.95

mg/Kg

271

Client Sample ID: FS04

Date Collected: 09/28/22 15:55

Date Received: 09/29/22 08:36

Sample Depth: 1

Chloride

	Organic Comp							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
o-Xylene	<0.00200	U *+	0.00200	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 12:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			10/08/22 13:26	10/11/22 12:48	1
1,4-Difluorobenzene (Surr)	95		70 - 130			10/08/22 13:26	10/11/22 12:48	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/11/22 12:45	1
Total BTEX Method: SW846 8015 NM - Diese				mg/Kg			10/11/22 12:45	1
•	l Range Organ			mg/Kg Unit		Prepared	10/11/22 12:45 Analyzed	1 Dil Fac
: Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)		D	Prepared		·
Method: SW846 8015 NM - Diese Analyte	Range Organ Result 89.5	ics (DRO) ((Qualifier	RL 50.0	Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Range Organ Result 89.5 sel Range Orga	ics (DRO) ((Qualifier	RL 50.0	Unit	D_	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	Range Organ Result 89.5 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 50.0	Unit mg/Kg		<u> </u>	Analyzed 10/03/22 11:45	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Range Organ Result 89.5 sel Range Orga Result	Qualifier nics (DRO) Qualifier	GC) RL 50.0 (GC) RL	Unit mg/Kg		Prepared	Analyzed 10/03/22 11:45 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 89.5 sel Range Orga Result <50.0	nics (DRO) (Qualifier nics (DRO) Qualifier U *1	(GC) RL 50.0 RL 50.0	Unit mg/Kg Unit mg/Kg		Prepared 09/30/22 14:01	Analyzed 10/03/22 11:45 Analyzed 09/30/22 23:06	Dil Fac Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 89.5 sel Range Orga Result <	nics (DRO) (Qualifier nics (DRO) Qualifier U *1	GC) RL 50.0 (GC) RL 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01	Analyzed 10/03/22 11:45 Analyzed 09/30/22 23:06 09/30/22 23:06	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 89.5 sel Range Organ Result <	nics (DRO) (Qualifier nics (DRO) Qualifier U *1	GC) RL 50.0 (GC) RL 50.0 50.0 50.0	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/30/22 14:01 09/30/22 14:01	Analyzed 10/03/22 11:45 Analyzed 09/30/22 23:06 09/30/22 23:06	Dil Fac Dil Fac 1

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10/11/2022

Job ID: 890-3105-1

SDG: 03E1558116

Client Sample ID: FS04

Project/Site: PLU PC 17

Lab Sample ID: 890-3105-4

Matrix: Solid

Date Collected: 09/28/22 15:55 Date Received: 09/29/22 08:36

Sample Depth: 1

Client: Ensolum

Method: MCAWW 300.0 - Anions, lo	on Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	650		4.95	mg/Kg			10/06/22 01:49	1

Client Sample ID: FS05 Lab Sample ID: 890-3105-5 Matrix: Solid

Date Collected: 09/28/22 16:25 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
o-Xylene	<0.00199	U *+	0.00199	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/08/22 13:26	10/11/22 13:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	73		70 - 130			10/08/22 13:26	10/11/22 13:08	1
1,4-Difluorobenzene (Surr)	87		70 - 130			10/08/22 13:26	10/11/22 13:08	1

Method: TAL SOP Total BTEX - Total BTEX Calculation									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Total BTEX	<0.00398	U	0.00398	mg/Kg			10/11/22 12:45	1

Method: SW846 8015 NM - Diesel F	Range Organics (DRO) (G0	3)					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	53.2	49.9	mg/Kg			10/03/22 11:45	1
_							

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		09/30/22 14:01	09/30/22 23:28	1
Diesel Range Organics (Over C10-C28)	53.2		49.9	mg/Kg		09/30/22 14:01	09/30/22 23:28	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/30/22 14:01	09/30/22 23:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	83		70 - 130			09/30/22 14:01	09/30/22 23:28	1
o-Terphenyl	79		70 - 130			09/30/22 14:01	09/30/22 23:28	1

Method: MCAWW 300.0 - Anions, Id	on Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	639		5.01	mg/Kg			10/06/22 01:55	1

Client: Ensolum Job ID: 890-3105-1 Project/Site: PLU PC 17 SDG: 03E1558116

Client Sample ID: FS06 Lab Sample ID: 890-3105-6

Date Collected: 09/28/22 16:05 Matrix: Solid Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 13:29	
Toluene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 13:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 13:29	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 13:29	1
o-Xylene	<0.00200	U *+	0.00200	mg/Kg		10/08/22 13:26	10/11/22 13:29	•
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/08/22 13:26	10/11/22 13:29	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		70 - 130			10/08/22 13:26	10/11/22 13:29	1
1,4-Difluorobenzene (Surr)	95		70 - 130			10/08/22 13:26	10/11/22 13:29	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/11/22 12:45	-
Method: SW846 8015 NM - Diese	al Range Organ	ics (DRO) ((3C)					
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/03/22 11:45	-
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	Result <50.0		• •	Mg/Kg	<u>D</u>	Prepared 09/30/22 14:01	Analyzed 09/30/22 23:49	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over		U *1	RL		<u> </u>	<u>.</u>		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0	U*1	RL 50.0	mg/Kg	<u>D</u>	09/30/22 14:01	09/30/22 23:49	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 <50.0	U*1 U	FL 50.0	mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01	09/30/22 23:49	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0 <50.0 <50.0	U*1 U	FL 50.0 50.0 50.0	mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01 09/30/22 14:01	09/30/22 23:49 09/30/22 23:49 09/30/22 23:49	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 <50.0 <50.0 %Recovery	U*1 U	50.0 50.0 50.0 Limits	mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared	09/30/22 23:49 09/30/22 23:49 09/30/22 23:49 Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 <50.0 <50.0 %Recovery 82 85	U *1 U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	09/30/22 23:49 09/30/22 23:49 09/30/22 23:49 Analyzed 09/30/22 23:49	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: MCAWW 300.0 - Anions Analyte	<50.0 <50.0 <50.0 <50.0 %Recovery 82 85 s, lon Chromato	U *1 U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01 09/30/22 14:01 Prepared 09/30/22 14:01	09/30/22 23:49 09/30/22 23:49 09/30/22 23:49 Analyzed 09/30/22 23:49	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Client Sample ID: FS07 Lab Sample ID: 890-3105-7

Date Collected: 09/28/22 16:10 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
o-Xylene	<0.00198	U *+	0.00198	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		10/08/22 13:26	10/11/22 13:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/08/22 13:26	10/11/22 13:49	1

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Matrix: Solid

Lab Sample ID: 890-3105-7

Client Sample Results

 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Client Sample ID: FS07

Date Collected: 09/28/22 16:10 Date Received: 09/29/22 08:36

Sample Depth: 1

Analyte

Chloride

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	96		70 - 130			10/08/22 13:26	10/11/22 13:49	-
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/11/22 12:45	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	195		49.9	mg/Kg			10/03/22 11:45	-
·								
•		nics (DRO)						
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO) Qualifier		Unit	D	Prepared	Analyzed	Dil Fac
Method: SW846 8015B NM - Dies Analyte	sel Range Orga	Qualifier	(GC)		<u>D</u>	Prepared 09/30/22 14:01	Analyzed 10/01/22 00:11	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	sel Range Orga Result	Qualifier	(GC)	Unit	<u>D</u>			Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	sel Range Orga Result	Qualifier	(GC)	Unit	<u>D</u>			Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result <49.9	Qualifier	(GC) RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	09/30/22 14:01	10/01/22 00:11	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <49.9	Qualifier U *1	(GC) RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	09/30/22 14:01	10/01/22 00:11	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	sel Range Orga Result <49.9	Qualifier U *1	(GC) RL 49.9	Unit mg/Kg mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01	10/01/22 00:11	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Orga Result <49.9 195 <49.9	Qualifier U *1	(GC) RL 49.9 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	09/30/22 14:01 09/30/22 14:01 09/30/22 14:01	10/01/22 00:11 10/01/22 00:11 10/01/22 00:11	

4.97

Unit

mg/Kg

Prepared

Analyzed

10/06/22 02:18

Dil Fac

Result Qualifier

287

Surrogate Summary

Job ID: 890-3105-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

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)	
890-3105-1	FS01	77	85	
890-3105-1 MS	FS01	85	101	
890-3105-1 MSD	FS01	82	100	
890-3105-2	FS02	57 S1-	100	
890-3105-3	FS03	52 S1-	105	
890-3105-4	FS04	93	95	
890-3105-5	FS05	73	87	
890-3105-6	FS06	97	95	
890-3105-7	FS07	74	96	
LCS 880-36450/1-A	Lab Control Sample	111	99	
LCSD 880-36450/2-A	Lab Control Sample Dup	122	106	
MB 880-36450/5-A	Method Blank	88	91	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance
		1CO1	OTPH1	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-3104-A-1-B MS	Matrix Spike	69 S1-	61 S1-	
90-3104-A-1-C MSD	Matrix Spike Duplicate	71	61 S1-	
0-3105-1	FS01	88	88	
0-3105-2	FS02	92	93	
0-3105-3	FS03	91	94	
0-3105-4	FS04	102	109	
-3105-5	FS05	83	79	
)-3105-6	FS06	82	85	
0-3105-7	FS07	83	84	
S 880-35819/2-A	Lab Control Sample	106	110	
CSD 880-35819/3-A	Lab Control Sample Dup	94	98	
B 880-35819/1-A	Method Blank	108	116	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-3105-1 Project/Site: PLU PC 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36450/5-A

Lab Sample ID: LCS 880-36450/1-A

Matrix: Solid

Matrix: Solid Analysis Batch: 36624 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36450

ı		MB	МВ						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Benzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
	Toluene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
I	Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
I	m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
I	o-Xylene	<0.00200	U	0.00200	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
	Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/08/22 13:26	10/11/22 10:43	1
ı									

MB MB

Surrogate	%Recovery G	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88	70 - 130	10/08/22 13:26	10/11/22 10:43	1
1,4-Difluorobenzene (Surr)	91	70 - 130	10/08/22 13:26	10/11/22 10:43	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36450

Prep Type: Total/NA

22

35

35

Analysis Batch: 36624 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08634 mg/Kg 86 70 - 130 Toluene 0.100 0.08646 mg/Kg 86 70 - 130 0.100 0.08708 Ethylbenzene mg/Kg 87 70 - 130 0.200 0.1903 95 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.1090 70 - 130 o-Xylene mg/Kg 109

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	111		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Client Sample ID: Lab Control Sample Dup

70 - 130

70 - 130

119

133

Matrix: Solid

Lab Sample ID: LCSD 880-36450/2-A

Analysis Batch: 36624

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Prep Batch: 36450 LCSD LCSD RPD Spike %Rec Added Result Qualifier Unit %Rec Limits RPD Limit 0.100 0.09637 mg/Kg 96 70 - 130 11 35 0.100 0.09772 mg/Kg 98 70 - 130 12 35 0.100 0.1077 mg/Kg 108 70 - 130 21 35

mg/Kg

mg/Kg

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-3105-1 MS

Matrix: Solid

Analysis Batch: 36624

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 36450

•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U F1 F2	0.0998	0.01209	F1	mg/Kg		12	70 - 130	
Toluene	<0.00202	U F1 F2	0.0998	0.007769	F1	mg/Kg		8	70 - 130	

0.200

0.100

0.2381

0.1334 *+

Job ID: 890-3105-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

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

Lab Sample ID: 890-3105-1 MS **Matrix: Solid**

Analysis Batch: 36624

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 36450

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U F1 F2	0.0998	0.008280	F1	mg/Kg		8	70 - 130	
m-Xylene & p-Xylene	<0.00403	U F1 F2	0.200	0.01613	F1	mg/Kg		8	70 - 130	
o-Xylene	<0.00202	U *+ F1	0.0998	0.01470	F1	mg/Kg		15	70 - 130	
		F2								

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	85	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: 890-3105-1 MSD

Matrix: Solid

Analysis Batch: 36624

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 36450

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limit Analyte Unit %Rec Limits RPD Benzene <0.00202 U F1 F2 0.0996 0.003787 F1 F2 4 70 - 130 105 35 mg/Kg Toluene <0.00202 UF1F2 0.0996 0.002329 F1 F2 mg/Kg 2 70 - 130 108 35 Ethylbenzene <0.00202 U F1 F2 0.0996 0.002969 F1 F2 mg/Kg 3 70 - 130 94 35 m-Xylene & p-Xylene <0.00403 U F1 F2 0.199 3 70 - 130 0.006455 F1 F2 mg/Kg 86 35 o-Xylene <0.00202 U*+ F1 0.0996 0.004802 F1 F2 mg/Kg 5 70 - 130 102 35 F2

MSD MSD

Surrogate	%Recovery Qua	lifier Limits
4-Bromofluorobenzene (Surr)	82	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

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

Lab Sample ID: MB 880-35819/1-A

Matrix: Solid

Analysis Batch: 35738

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

Prep Batch: 35819

Analyte Result Qualifier Unit Prepared Analyzed Dil Fac Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/30/22 14:01 09/30/22 19:10 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/30/22 14:01 09/30/22 19:10 C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 09/30/22 14:01 09/30/22 19:10

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	108		70 - 130	09/30/22 14:01	09/30/22 19:10	1
o-Terphenyl	116		70 - 130	09/30/22 14:01	09/30/22 19:10	1

Lab Sample ID: LCS 880-35819/2-A

Matrix: Solid

Analysis Batch: 35738

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

Prep Batch: 35819

_	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1130	-	mg/Kg		113	70 - 130	

(GRO)-C6-C10

Job ID: 890-3105-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

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

Lab Sample ID: LCS 880-35819/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 35738 Prep Batch: 35819

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics (Over	1000	983.8		mg/Kg		98	70 - 130	
C10 C28)								

C10-C28)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	106		70 - 130
o-Terphenyl	110		70 - 130

ICED ICED

Lab Sample ID: LCSD 880-35819/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 35738 Prep Batch: 35819

Spike LCSD LCSD %Rec RPD Result Qualifier Limit Analyte Added Unit D %Rec Limits RPD 1000 805.1 *1 81 70 - 130 34 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 871.5 mg/Kg 87 70 - 130 12 20

C10-C28)

	LC3D LC	30	
Surrogate	%Recovery Qu	alifier Limits	
1-Chlorooctane	94	70 - 13	10
o-Terphenyl	98	70 - 13	10

Lab Sample ID: 890-3104-A-1-B MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 35738 Prep Batch: 35819 Sample Sample Spike MS MS %Rec

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 998 887.3 mg/Kg 87 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 563 F1 998 954.4 F1 39 70 - 130 mg/Kg

C10-C28)

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	69	S1-	70 - 130
o-Terphenyl	61	S1-	70 - 130

Lab Sample ID: 890-3104-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 35738

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Qualifier RPD Limit Result Unit D %Rec Limits Gasoline Range Organics <50.0 U *1 999 976.8 mg/Kg 96 70 - 130 10 20 (GRO)-C6-C10 563 F1 999 983.3 F1 42 70 - 130 3 20 Diesel Range Organics (Over mg/Kg

C10-C28)

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	71		70 - 130
o-Terphenyl	61	S1-	70 - 130

MSD MSD

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Prep Batch: 35819

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Prep Type: Soluble

Client Sample ID: Matrix Spike

Job ID: 890-3105-1 Client: Ensolum Project/Site: PLU PC 17 SDG: 03E1558116

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-35811/1-A

Matrix: Solid

Analysis Batch: 36008

MB MB

Analyte Result Qualifier RLUnit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/04/22 02:55

Lab Sample ID: LCS 880-35811/2-A

Matrix: Solid

Analysis Batch: 36008

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 248.2 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-35811/3-A

Matrix: Solid

Analysis Batch: 36008

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 263.8 mg/Kg 106 90 - 110

Lab Sample ID: 880-19836-A-5-B MS

Matrix: Solid

Analysis Batch: 36008

Sample Sample MS MS Spike %Rec Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chloride 330 F1 248 531.6 F1 90 - 110 mg/Kg

Lab Sample ID: 880-19836-A-5-C MSD

Matrix: Solid

Analysis Batch: 36008

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 330 F1 Chloride 248 552.4 mg/Kg 90 90 - 110

Lab Sample ID: MB 880-36004/1-A

Matrix: Solid

Analysis Batch: 36198

мв мв

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 5.00 mg/Kg 10/06/22 01:02

Lab Sample ID: LCS 880-36004/2-A

Matrix: Solid

Analysis Batch: 36198

LCS LCS %Rec Spike Added Result Qualifier Limits Analyte Unit %Rec Chloride 250 257.6 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-36004/3-A

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Matrix: Solid

Analysis Batch: 36198

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 248.5 mg/Kg 99 90 - 110

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Client Sample ID: Lab Control Sample Dup

QC Sample Results

Client: Ensolum Job ID: 890-3105-1 SDG: 03E1558116 Project/Site: PLU PC 17

Method: 300.0 - Anions, Ion Chromatography

81.9

Lab Sample ID: 890-3104-A-1-E MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 36198

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits 250

Lab Sample ID: 890-3104-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

312.0

mg/Kg

92

90 - 110

Analysis Batch: 36198

Chloride

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 81.9 250 326.2 mg/Kg 98 90 - 110 4 20

 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

GC VOA

Prep Batch: 36450

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	5035	
890-3105-2	FS02	Total/NA	Solid	5035	
890-3105-3	FS03	Total/NA	Solid	5035	
890-3105-4	FS04	Total/NA	Solid	5035	
890-3105-5	FS05	Total/NA	Solid	5035	
890-3105-6	FS06	Total/NA	Solid	5035	
890-3105-7	FS07	Total/NA	Solid	5035	
MB 880-36450/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36450/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36450/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3105-1 MS	FS01	Total/NA	Solid	5035	
890-3105-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 36624

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	8021B	36450
890-3105-2	FS02	Total/NA	Solid	8021B	36450
890-3105-3	FS03	Total/NA	Solid	8021B	36450
890-3105-4	FS04	Total/NA	Solid	8021B	36450
890-3105-5	FS05	Total/NA	Solid	8021B	36450
890-3105-6	FS06	Total/NA	Solid	8021B	36450
890-3105-7	FS07	Total/NA	Solid	8021B	36450
MB 880-36450/5-A	Method Blank	Total/NA	Solid	8021B	36450
LCS 880-36450/1-A	Lab Control Sample	Total/NA	Solid	8021B	36450
LCSD 880-36450/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36450
890-3105-1 MS	FS01	Total/NA	Solid	8021B	36450
890-3105-1 MSD	FS01	Total/NA	Solid	8021B	36450

Analysis Batch: 36675

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	Total BTEX	
890-3105-2	FS02	Total/NA	Solid	Total BTEX	
890-3105-3	FS03	Total/NA	Solid	Total BTEX	
890-3105-4	FS04	Total/NA	Solid	Total BTEX	
890-3105-5	FS05	Total/NA	Solid	Total BTEX	
890-3105-6	FS06	Total/NA	Solid	Total BTEX	
890-3105-7	FS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 35738

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	8015B NM	35819
890-3105-2	FS02	Total/NA	Solid	8015B NM	35819
890-3105-3	FS03	Total/NA	Solid	8015B NM	35819
890-3105-4	FS04	Total/NA	Solid	8015B NM	35819
890-3105-5	FS05	Total/NA	Solid	8015B NM	35819
890-3105-6	FS06	Total/NA	Solid	8015B NM	35819
890-3105-7	FS07	Total/NA	Solid	8015B NM	35819
MB 880-35819/1-A	Method Blank	Total/NA	Solid	8015B NM	35819
LCS 880-35819/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35819

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 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

GC Semi VOA (Continued)

Analysis Batch: 35738 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-35819/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35819
890-3104-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	35819
890-3104-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35819

Prep Batch: 35819

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	8015NM Prep	
890-3105-2	FS02	Total/NA	Solid	8015NM Prep	
890-3105-3	FS03	Total/NA	Solid	8015NM Prep	
890-3105-4	FS04	Total/NA	Solid	8015NM Prep	
890-3105-5	FS05	Total/NA	Solid	8015NM Prep	
890-3105-6	FS06	Total/NA	Solid	8015NM Prep	
890-3105-7	FS07	Total/NA	Solid	8015NM Prep	
MB 880-35819/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35819/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35819/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3104-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3104-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35981

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Total/NA	Solid	8015 NM	
890-3105-2	FS02	Total/NA	Solid	8015 NM	
890-3105-3	FS03	Total/NA	Solid	8015 NM	
890-3105-4	FS04	Total/NA	Solid	8015 NM	
890-3105-5	FS05	Total/NA	Solid	8015 NM	
890-3105-6	FS06	Total/NA	Solid	8015 NM	
890-3105-7	FS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Soluble	Solid	DI Leach	
890-3105-2	FS02	Soluble	Solid	DI Leach	
MB 880-35811/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35811/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35811/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19836-A-5-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19836-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 36004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-3	FS03	Soluble	Solid	DI Leach	
890-3105-4	FS04	Soluble	Solid	DI Leach	
890-3105-5	FS05	Soluble	Solid	DI Leach	
890-3105-6	FS06	Soluble	Solid	DI Leach	
890-3105-7	FS07	Soluble	Solid	DI Leach	
MB 880-36004/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36004/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36004/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

HPLC/IC (Continued)

Leach Batch: 36004 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-3104-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach
890-3104-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach

Analysis Batch: 36008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-1	FS01	Soluble	Solid	300.0	35811
890-3105-2	FS02	Soluble	Solid	300.0	35811
MB 880-35811/1-A	Method Blank	Soluble	Solid	300.0	35811
LCS 880-35811/2-A	Lab Control Sample	Soluble	Solid	300.0	35811
LCSD 880-35811/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35811
880-19836-A-5-B MS	Matrix Spike	Soluble	Solid	300.0	35811
880-19836-A-5-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35811

Analysis Batch: 36198

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3105-3	FS03	Soluble	Solid	300.0	36004
890-3105-4	FS04	Soluble	Solid	300.0	36004
890-3105-5	FS05	Soluble	Solid	300.0	36004
890-3105-6	FS06	Soluble	Solid	300.0	36004
890-3105-7	FS07	Soluble	Solid	300.0	36004
MB 880-36004/1-A	Method Blank	Soluble	Solid	300.0	36004
LCS 880-36004/2-A	Lab Control Sample	Soluble	Solid	300.0	36004
LCSD 880-36004/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36004
890-3104-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	36004
890-3104-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	36004

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Job ID: 890-3105-1

SDG: 03E1558116

Client Sample ID: FS01

Client: Ensolum Project/Site: PLU PC 17

Lab Sample ID: 890-3105-1

Matrix: Solid

Date Collected: 09/28/22 16:15 Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 11:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 22:03	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	35811	09/30/22 12:35	SMC	EET MID
Soluble	Analysis	300.0		1			36008	10/04/22 05:15	CH	EET MID

Client Sample ID: FS02 Lab Sample ID: 890-3105-2

Date Collected: 09/28/22 15:45 Matrix: Solid Date Received: 09/29/22 08:36

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.01 g 5 mL 36450 10/08/22 13:26 MNR EET MID Total/NA 8021B 10/11/22 12:07 **EET MID** Analysis 1 5 mL 5 mL 36624 MNR Total/NA Total BTEX 36675 10/11/22 12:45 MNR Analysis **EET MID** 1 Total/NA Analysis 8015 NM 35981 10/03/22 11:45 SM **EET MID** Total/NA 35819 8015NM Prep 10.00 g 10 mL 09/30/22 14:01 DM EET MID Prep Total/NA Analysis 8015B NM 1 uL 1 uL 35738 09/30/22 22:24 SM **EET MID** Soluble 09/30/22 12:35 Leach DI Leach 4.99 g 50 mL 35811 SMC **EET MID** Soluble Analysis 300.0 36008 10/04/22 05:20 СН **EET MID**

Client Sample ID: FS03 Lab Sample ID: 890-3105-3

Date Collected: 09/28/22 16:20 **Matrix: Solid** Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 12:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 22:45	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	36004	10/03/22 14:30	KS	EET MID
Soluble	Analysis	300.0		1			36198	10/06/22 01:43	CH	EET MID

Lab Sample ID: 890-3105-4 **Client Sample ID: FS04**

Date Collected: 09/28/22 15:55 **Matrix: Solid** Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 12:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID

Client: Ensolum Project/Site: PLU PC 17 Job ID: 890-3105-1 SDG: 03E1558116

Client Sample ID: FS04 Lab Sample ID: 890-3105-4

Date Collected: 09/28/22 15:55

Date Received: 09/29/22 08:36

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 23:06	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	36004	10/03/22 14:30	KS	EET MID
Soluble	Analysis	300.0		1			36198	10/06/22 01:49	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-3105-5

Date Collected: 09/28/22 16:25 Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 13:08	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 23:28	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	36004	10/03/22 14:30	KS	EET MID
Soluble	Analysis	300.0		1			36198	10/06/22 01:55	CH	EET MID

Client Sample ID: FS06 Lab Sample ID: 890-3105-6

Date Collected: 09/28/22 16:05 Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 13:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	35819	09/30/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35738	09/30/22 23:49	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	36004	10/03/22 14:30	KS	EET MIC
Soluble	Analysis	300.0		1			36198	10/06/22 02:12	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-3105-7

Date Collected: 09/28/22 16:10 Date Received: 09/29/22 08:36

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	36450	10/08/22 13:26	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36624	10/11/22 13:49	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36675	10/11/22 12:45	MNR	EET MID
Total/NA	Analysis	8015 NM		1			35981	10/03/22 11:45	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	35819 35738	09/30/22 14:01 10/01/22 00:11	DM SM	EET MID EET MID

Eurofins Carlsbad

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Matrix: Solid

Matrix: Solid

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Matrix: Solid

Lab Chronicle

 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Client Sample ID: FS07 Lab Sample ID: 890-3105-7

Date Collected: 09/28/22 16:10

Date Received: 09/29/22 08:36

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.03 g	50 mL	36004	10/03/22 14:30	KS	EET MID
Soluble	Analysis	300.0		1			36198	10/06/22 02:18	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas		ELAP	T104704400-22-24	06-30-23	
The following analytes the agency does not of		ut the laboratory is not certific	ed by the governing authority. This list ma	ay include analytes for	
0 ,					
Analysis Method		Matrix	Analyte		
0 ,		Matrix Solid	Analyte Total TPH		

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Method Summary

 Client: Ensolum
 Job ID: 890-3105-1

 Project/Site: PLU PC 17
 SDG: 03E1558116

Method **Method Description** Protocol Laboratory 8021B Volatile Organic Compounds (GC) SW846 EET MID **Total BTEX Calculation** Total BTEX 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 MCAWW **EET MID** 5035 SW846 **EET MID** Closed System Purge and Trap 8015NM Prep Microextraction SW846 EET MID

Protocol References:

DI Leach

ASTM = ASTM International

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions. SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Deionized Water Leaching Procedure

Laboratory References:

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

Eurofins Carlsbad

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EET MID

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Sample Summary

Client: Ensolum

Project/Site: PLU PC 17

Job ID: 890-3105-1

SDG: 03E1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3105-1	FS01	Solid	09/28/22 16:15	09/29/22 08:36	1
890-3105-2	FS02	Solid	09/28/22 15:45	09/29/22 08:36	1
890-3105-3	FS03	Solid	09/28/22 16:20	09/29/22 08:36	1
890-3105-4	FS04	Solid	09/28/22 15:55	09/29/22 08:36	1
890-3105-5	FS05	Solid	09/28/22 16:25	09/29/22 08:36	1
890-3105-6	FS06	Solid	09/28/22 16:05	09/29/22 08:36	1
890-3105-7	FS07	Solid	09/28/22 16:10	09/29/22 08:36	1

service. Eurofins Xenco w tice: Signature of this doc Circle Method(s)

eurofins 🔅 Environment Testing Xenco

Phone:

City, State ZIP:

Address:

Company Name: Project Manager:

SAMPLE RECEIPT

Cooler Custody Seals: samples Received Inta

ample Custody Seals

Total Containers:

Sampler's Name:

Project Location:

Project Number: Project Name:

Chain of Custody

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 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Turn Around ANALYSIS REQUEST Preservative Codes ANALYSIS REQUEST Preservative Codes None: NO DI Water: H ₂ O Cool Cool Cool MeOH Me Start fixed synchrology 4-35bm With intercond by 4-35bm With intercond by 4-35bm Start fixed synchrology 4-35bm	Sampled Sal Salbeida in Sampled Salbeida in Salbeida i
Preservative None: NO Cool: Cool HCL: HC H2S0 4: H2 H3PO 4: H9 NaHSO 4: NABIS Na 25 203: NASO 3 Zn Acetate+NaOH NaOH+Ascorbic Ac Sample Con PB106 Se Ag SiO ₂ Na Sr TI Sn U V Zn Hg: 1631 / 245.1 / 7470 / 7471 Date Ceived by: (Signature) Date	FSO 2 FSO 2 FSO 3 FSO 5 FSO 5 FSO 5 FSO 5 FSO 5 FSO 5 FSO 6 FSO 7 FSO 8 FSO 7 FS
Preservative None: NO Cool: Cool HcL: HC H ₂ S0 4: H ₂ H ₃ PO 4: H ₂ NaHSO 4: NABIS Na ₂ S ₂ O ₃ : NASO 3 Zn Acetate+NaOH NaOH+Ascorbic Ac Sample Con AC 1 Clean NACP 227 NA	Sampled Sampled Comp Cont (
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Preservative None: NO Cool: Cool H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH NaOH+Ascorbic Ac Sample Con D8106	Sampled Sampled Comp Cont () 1545 C X 1626 C X 1625 C X 1625
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NONE: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₆ : HP NAHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NASO ₃ Zn Acctate+NaOH NaOH+Ascorbic Ac Sample Con Sample Con	Sampled Sampled Comp Cont Cont Cont Cont Cont Cont Cont Cont
NALYSIS REQUEST Preservative Cool: Cool HcL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH NaOH+Ascorbic Ac Sample Con	Sampled Sampled Comp Cont
ANALYSIS REQUEST Preservative Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH NaOH+Ascorbic Ac	Time Depth Grab/ # of
ANALYSIS REQUEST Preservative Cool: Cool HcL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NaSO ₃ Zn Acetate+NaOH	tal Containers: Corrected Temperature:
ANALYSIS REQUEST Preservative None: NO Cool: Cool HCL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS Na ₂ S ₂ O ₃ : NASO ₃	
ANALYSIS REQUEST Preservative None: NO Cool: Cool HCL: HC H ₂ 50 ₄ : H ₂ H ₃ PO ₄ : HP NaHSO ₄ : NABIS	Yes NO N/A Correction Factor:
ANALYSIS REQUEST Preservative None: NO Cool: Cool HcL: HC H ₂ SO ₄ : H ₂ H ₃ PO ₄ : HP	tact: (Yes No Thermometer ID: TANA CO
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ANALYSIS REQUEST Preservative None: NO Cool: Cool	mpler's Name: VETECT HAVE DECTS TAT starts the day received by the lab, if received by 4:30pm
NALYSIS REQUEST Preservative	32,1242,703.896
ANALYSIS REQUEST	Der: 03
	ect Name: PLAPC 17 Turn Around
Deliverables: EDD ADaPT Other:	189.854.0852 Email: bbelill@casolum.com
Reporting: Level III Level III L	3228 City, State ZIP:
State of Project:	3122 Nati Parks Huy Address:
X TO じゃらなす Program: UST/PST PRP Brownfields RRC Superfund	Company Name:
Charrett Green Work Order Comments	ject Manager: Ben Benill Bill to: (if different)

Work Order No:

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3105-1

SDG Number: 03E1558116

Login Number: 3105 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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 ampered 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	
s the Field Sampler's name present on COC?	True	
here 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	
ppropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
here is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is 6mm (1/4").	N/A	

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Login Sample Receipt Checklist

Client: Ensolum Job

Job Number: 890-3105-1 SDG Number: 03E1558116

Login Number: 3105
List Source: Eurofins Midland
List Number: 2
List Creation: 09/30/22 10:28 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



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ANALYTICAL REPORT

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

Laboratory Job ID: 890-3295-1

Laboratory Sample Delivery Group: 03e1558116
Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings



Authorized for release by: 10/28/2022 4:28:09 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Review your project results through

------ LINKS ------

Have a Question?



Visit us at:

www.eurofinsus.com/Env
Released to Imaging: 2/3/2023 11:35:16 AM

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

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

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3295-1
SDG: 03e1558116

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Racaint Chacklists	18

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Qualifier Description

Definitions/Glossary

Job ID: 890-3295-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03e1558116

Qualifiers

GC	VOA
Qual	ifier

*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits

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.

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

DLC

EDL

LOD

LOQ

MCL MDA

MDC

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				

MDL Method Detection Limit MI MPN

Minimum Level (Dioxin) Most Probable Number MQL Method Quantitation Limit

NC Not Calculated

ND Not Detected at the reporting limit (or MDL or EDL if shown)

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Activity (Radiochemistry) Minimum Detectable Concentration (Radiochemistry)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE)

Limit of Quantitation (DoD/DOE)

NEG Negative / Absent POS Positive / Present Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Job ID: 890-3295-1 SDG: 03e1558116 Project/Site: PLU Pierce Canyon 17

Job ID: 890-3295-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3295-1

Receipt

The sample was received on 10/26/2022 2:58 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-38022 and analytical batch 880-38059 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene.

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-38022 and analytical batch 880-38059 recovered outside control limits for the following analytes: Benzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

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

GC Semi VOA

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38060 and analytical batch 880-38052 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Lab Sample ID: 890-3295-1

Client Sample Results

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

SDG: 03e1558116

Client Sample ID: FS02A

Date Collected: 10/26/22 12:25 Date Received: 10/26/22 14:58

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+ *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 13:40	1
Toluene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 13:40	1
Ethylbenzene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 13:40	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398	mg/Kg		10/28/22 09:00	10/28/22 13:40	1
o-Xylene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 13:40	
Xylenes, Total	<0.00398	U *1	0.00398	mg/Kg		10/28/22 09:00	10/28/22 13:40	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	84		70 - 130			10/28/22 09:00	10/28/22 13:40	1
1,4-Difluorobenzene (Surr)	89		70 - 130			10/28/22 09:00	10/28/22 13:40	1
Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/28/22 17:21	1
- Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/28/22 17:10	1
- Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/28/22 08:54	10/28/22 13:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/28/22 08:54	10/28/22 13:11	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/28/22 08:54	10/28/22 13:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	104		70 - 130			10/28/22 08:54	10/28/22 13:11	1
o-Terphenyl	100		70 - 130			10/28/22 08:54	10/28/22 13:11	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	113		4.99	mg/Kg			10/28/22 14:53	1

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Surrogate Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

SDG: 03e1558116

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20848-A-21-A MS	Matrix Spike	88	80	
880-20848-A-21-B MSD	Matrix Spike Duplicate	84	75	
890-3295-1	FS02A	84	89	
LCS 880-38022/1-A	Lab Control Sample	127	127	
LCSD 880-38022/2-A	Lab Control Sample Dup	86	83	
MB 880-38022/5-A	Method Blank	72	81	
Surrogate Legend				
BFB = 4-Bromofluorober	zene (Surr)			
DFBZ = 1,4-Difluorobenz	rene (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)	
880-20851-A-3-C MS	Matrix Spike	86	72	
880-20851-A-3-D MSD	Matrix Spike Duplicate	100	79	
390-3295-1	FS02A	104	100	
_CS 880-38060/2-A	Lab Control Sample	124	105	
CSD 880-38060/3-A	Lab Control Sample Dup	122	106	
MB 880-38060/1-A	Method Blank	133 S1+	136 S1+	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Client: Ensolum Job ID: 890-3295-1 SDG: 03e1558116 Project/Site: PLU Pierce Canyon 17

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38022/5-A

Matrix: Solid

Analysis Batch: 38059

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38022

	MB	мв						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	•
Toluene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/27/22 13:44	10/28/22 10:55	
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/27/22 13:44	10/28/22 10:55	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	10/27/22 13:44	10/28/22 10:55	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/27/22 13:44	10/28/22 10:55	1

Lab Sample ID: LCS 880-38022/1-A

Matrix: Solid

Analysis Batch: 38059

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 38022

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1306	*+	mg/Kg		131	70 - 130	
Toluene	0.100	0.1257		mg/Kg		126	70 - 130	
Ethylbenzene	0.100	0.1232		mg/Kg		123	70 - 130	
m-Xylene & p-Xylene	0.200	0.2415		mg/Kg		121	70 - 130	
o-Xylene	0.100	0.1175		mg/Kg		117	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	127		70 - 130

Lab Sample ID: LCSD 880-38022/2-A

Matrix: Solid

Analysis Batch: 38059

Prep Type: Total/NA

Prep Batch: 38022

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08475	*1	mg/Kg		85	70 - 130	43	35
Toluene	0.100	0.08733	*1	mg/Kg		87	70 - 130	36	35
Ethylbenzene	0.100	0.08583	*1	mg/Kg		86	70 - 130	36	35
m-Xylene & p-Xylene	0.200	0.1612	*1	mg/Kg		81	70 - 130	40	35
o-Xylene	0.100	0.07790	*1	mg/Kg		78	70 - 130	41	35

LCSD LCSD

F2

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	86	70 - 130
1.4-Difluorobenzene (Surr)	83	70 - 130

Lab Sample ID: 880-20848-A-21-A MS

Matrix: Solid

Analysis Batch: 38059

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

Prep Batch: 38022

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00200	U *+ *1 F1	0.0996	0.08214		mg/Kg		82	70 - 130

QC Sample Results

Job ID: 890-3295-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03e1558116

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

Lab Sample ID: 880-20848-A-21-A MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38059

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Toluene <0.00200 U *1 0.0996 0.08676 87 70 - 130 mg/Kg Ethylbenzene <0.00200 U *1 0.0996 0.08195 mg/Kg 82 70 - 130 <0.00401 U *1 0.199 0.1543 77 70 - 130 m-Xylene & p-Xylene mg/Kg o-Xylene <0.00200 U*1F1 0.0996 0.07423 mg/Kg 74 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: 880-20848-A-21-B MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 38059

Prep Type: Total/NA

Prep Batch: 38022

Prep Batch: 38022

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U *+ *1 F1	0.0994	0.05518	F1 F2	mg/Kg		56	70 - 130	39	35
		F2									
Toluene	<0.00200	U *1	0.0994	0.07694		mg/Kg		77	70 - 130	12	35
Ethylbenzene	<0.00200	U *1	0.0994	0.08138		mg/Kg		82	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U *1	0.199	0.1388		mg/Kg		70	70 - 130	11	35
o-Xylene	<0.00200	U *1 F1	0.0994	0.06437	F1	mg/Kg		64	70 - 130	14	35

MSD MSD

MR MR

Result

Qualifier

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	84		70 - 130
1,4-Difluorobenzene (Surr)	75		70 - 130

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

Lab Sample ID: MB 880-38060/1-A

Matrix: Solid

Analyte

Analysis Batch: 38052

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 38060

Analyzed Dil Fac 10/28/22 09:37

<50.0 Ū 50.0 10/28/22 08:54 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 10/28/22 08:54 10/28/22 09:37 mg/Kg C10-C28) Oll Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 10/28/22 08:54 10/28/22 09:37

RL

Unit

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Prepared

MB MB

Qualifier Limits Surrogate %Recovery Prepared Dil Fac Analyzed 1-Chlorooctane 133 S1+ 70 - 130 10/28/22 08:54 10/28/22 09:37 o-Terphenyl 136 S1+ 10/28/22 08:54 70 - 130 10/28/22 09:37

Lab Sample ID: LCS 880-38060/2-A

Matrix: Solid

Analysis Batch: 38052

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

Prep Batch: 38060

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 753.6 mg/Kg 75 70 - 130

(GRO)-C6-C10

QC Sample Results

Job ID: 890-3295-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03e1558116

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

Lab Sample ID: LCS 880-38060/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 38052 Prep Batch: 38060

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Diesel Range Organics (Over	1000	949.3		mg/Kg		95	70 - 130	
C10 C28)								

C10-C28)

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	124	70 - 130
o-Terphenyl	105	70 - 130

Lab Sample ID: LCSD 880-38060/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 38052 Prep Batch: 38060

Spike LCSD LCSD %Rec RPD Result Qualifier Limit Analyte Added Unit D %Rec Limits RPD 1000 729.2 70 - 130 20 Gasoline Range Organics mg/Kg 73 (GRO)-C6-C10 Diesel Range Organics (Over 1000 960.5 mg/Kg 96 70 - 130 20

C10-C28)

	LCSD LCSD	
Surrogate	%Recovery Qualifie	r Limits
1-Chlorooctane	122	70 - 130
o-Terphenyl	106	70 - 130

LCSD LCSD

Lab Sample ID: 880-20851-A-3-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 38052

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits 1110 F1 998 696.2 F1 mg/Kg -42 70 - 130

Gasoline Range Organics (GRO)-C6-C10 <49.8 U 998 815.2 82 70 - 130 Diesel Range Organics (Over mg/Kg C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 86 70 - 130 o-Terphenyl 72 70 - 130

Lab Sample ID: 880-20851-A-3-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 38052** Prep Batch: 38060

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier RPD Limit Unit %Rec Limits 1110 F1 Gasoline Range Organics 998 731.3 F1 mg/Kg -38 70 - 130 20 (GRO)-C6-C10

Diesel Range Organics (Over	<49.8	U	998	905.6	mg/Kg	91	70 - 130
C10-C28)							
	MSD	MSD					
Surrogate	%Recovery	Qualifier	Limits				
1-Chlorooctane	100		70 - 130				

70 - 130

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Prep Batch: 38060

o-Terphenyl

Client: Ensolum Job ID: 890-3295-1 Project/Site: PLU Pierce Canyon 17

SDG: 03e1558116

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38086/1-A

Matrix: Solid

Analysis Batch: 38100

Prep Type: Soluble MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/28/22 13:27

Lab Sample ID: LCS 880-38086/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 257.4 mg/Kg 103 90 - 110

Lab Sample ID: LCSD 880-38086/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble** Analysis Batch: 38100

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 258.0 mg/Kg 103 90 - 110

Lab Sample ID: 890-3298-A-1-C MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 220 249 458.4 90 - 110 mg/Kg

Lab Sample ID: 890-3298-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 38100

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 220 459.9 mg/Kg 97 90 - 110 0 20

QC Association Summary

Client: Ensolum Job ID: 890-3295-1
Project/Site: PLU Pierce Canyon 17 SDG: 03e1558116

GC VOA

Prep Batch: 38022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Total/NA	Solid	5035	
MB 880-38022/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38022/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38022/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20848-A-21-A MS	Matrix Spike	Total/NA	Solid	5035	
880-20848-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Total/NA	Solid	8021B	38022
MB 880-38022/5-A	Method Blank	Total/NA	Solid	8021B	38022
LCS 880-38022/1-A	Lab Control Sample	Total/NA	Solid	8021B	38022
LCSD 880-38022/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38022
880-20848-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	38022
880-20848-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38022

Analysis Batch: 38131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 38052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Total/NA	Solid	8015B NM	38060
MB 880-38060/1-A	Method Blank	Total/NA	Solid	8015B NM	38060
LCS 880-38060/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38060
LCSD 880-38060/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38060
880-20851-A-3-C MS	Matrix Spike	Total/NA	Solid	8015B NM	38060
880-20851-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38060

Prep Batch: 38060

Lab Sample ID 890-3295-1	Client Sample ID FS02A	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-38060/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38060/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38060/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-20851-A-3-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-20851-A-3-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38124

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38086

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Soluble	Solid	DI Leach	
MB 880-38086/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38086/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38086/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
SDG: 03e1558116

OLO (Continued)

HPLC/IC (Continued)

Leach Batch: 38086 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	890-3298-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
l	890-3298-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 38100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3295-1	FS02A	Soluble	Solid	300.0	38086
MB 880-38086/1-A	Method Blank	Soluble	Solid	300.0	38086
LCS 880-38086/2-A	Lab Control Sample	Soluble	Solid	300.0	38086
LCSD 880-38086/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38086
890-3298-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	38086
890-3298-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	38086

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Lab Chronicle

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Job ID: 890-3295-1
SDG: 03e1558116

Client Sample ID: FS02A

Lab Sample ID: 890-3295-1

Matrix: Solid

Date Collected: 10/26/22 12:25 Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38022	10/28/22 09:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38059	10/28/22 13:40	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			38131	10/28/22 17:21	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38124	10/28/22 17:10	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38060	10/28/22 08:54	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38052	10/28/22 13:11	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38086	10/28/22 10:55	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38100	10/28/22 14:53	SMC	EET MID

Laboratory References:

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

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Released to Imaging: 2/3/2023 11:35:16 AM

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
SDG: 03e1558116

aboratory: Furofine Midland

Laboratory: Eurofins MidlandUnless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Texas	NELAP	T104704400-22-24	06-30-23
The following analytes are included in this reporthe agency does not offer certification.	rt, but the laboratory is not certifie	ed by the governing authority. This list ma	ay include analytes for which

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

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Method Summary

Job ID: 890-3295-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03e1558116

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	MCAWW	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

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3295-1

SDG: 03e1558116

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3295-1	FS02A	Solid	10/26/22 12:25	10/26/22 14:58	2

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Circle Method(s) and

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Revised Date: 08/25/2020 Rev 2020.2

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Phone:

City, State ZIP:

Carlsbad, NM 88220 3122 National Parks Hwy

City, State ZIP: Address: Company Name: Bill to: (if different)

Carlsbad, NM 88220 3104 E. Green St XTO Energy Garrett Green

Address:

Project Manager: Company Name:

Ben Beiill

Ensolum

SAMPLE RECEIPT

Sampler's Name: Project Location: Project Number: Project Name:

Samples Received Intac

Chain of Custody

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

Work Order No:

www.xenco.com Page of
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:

Relinquished by: (Signature)	otice: Signature of this doc service. Eurofins Xenco v Eurofins Xenco. A minimu	ircle Method(s) and	Total 200.7 / 6010										FSO2A	Sample Identification	otal Containers:	ample Custody Seals:	ooler Custody Seals:	amples Received Intact:	AMPLE RECEIPT	#	ampler's Name:	roject Location:	roject Number:	roject Name:	hone: 30
Signature)	ument and relinquishment o vill be liable only for the cos im charge of \$85.00 will be a	ircle Method(s) and Metal(s) to be analyzed	200.8 / 6020:						/				5	cation Matrix		Yes No V N/A	Yes No MITA	St. (Ke) No	Temp Blank:		Connor Whitman		03E1558116	PLU Pierce Canyon 17	303-887-2946
Received	of samples constituted from the samples and samples and samples and samplied to each pro-	zed	8RC										0/25/22	Date Sampled	Corrected Temperature	Temperature Reading:	Correction Factor:	Thermometer ID:	No set		nan		6	yon 17	
Received by: (Signature)	Ites a valid purcha hall not assume a bject and a charge	TCLP / SPL	8RCRA 13PPM					REAL					12:25	Time [perature:		-	N	Wet Ice:	the lab, if received by 4:30pm	TAT starts the day received by	Due Date:	Routine	Turn Around	Email: G
е)	ise order from clie ny responsibility f of \$5 for each sai	P 6010: 8RC	Texas 11 Al Sb As			/	/						ング	Depth Comp	2.6	थ	6.0-	FOCM	(Yes) No	red by 4:30pm	ay received by	2 day	Rush		Email: Garrett Green/
D	nt compa or any los nple subr	RA SI	AS IA	-	1	1							-	# of Cont					nete	ers			Code		DEXX
Date/Time	ny to Euro ses or exp nitted to E	As B	Ва	-	/	\parallel	_	-					/	TPH (8		S (EI	PA:	300.	0)	-		-			Mobil c
0	fins Xenc enses inc urofins Xe	a Be C	Be B Cd Ca	1									1	BTEX (8021)			T						orn
Relinquished by: (Signature)	stice: 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 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 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.	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se	Cr Co Cu Fe Pb													890-3295 Chain of Custody								ANALYSIS REQUEST	Deliverables
Received by: (Signature)	assigns standard terms and conditions due to circumstances beyond the controll be enforced unless previously negotial.	Ni Se Ag TI U Hg:	Mg Mn Mo Ni K Se Ag												_	stody					_				ables, EDD L
Signature)	ons ntrol gotiated.	Hg: 1631 / 245.1 / 7470 / 7471	Se Ag SiO ₂ Na Sr Tl Sn U V Zn						AFE:	101	Cost Center:	nAPP2223832773	Incident ID:	Sampl	NaOH+Ascor	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSO ₄ : NABIS	H ₃ PO ₄ : HP	H ₂ S0 ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Preser	Care
Date/Time		0 /7471	UZ V U							1081061001	7	332773		Sample Comments	NaOH+Ascorbic Acid: SAPC	VaOH: Zn	SO ₃	BIS		NaOH Na	HNO3: HN	MeOH: Me	DI Water: H ₂ O	Preservative Codes	ā.
														Page	17	of	19)							

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3295-1 SDG Number: 03e1558116

Login Number: 3295 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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 No

Job Number: 890-3295-1 SDG Number: 03e1558116

List Source: Eurofins Midland
List Number: 2
List Creation: 10/28/22 10:29 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3296-1

Laboratory Sample Delivery Group: 03E1558116

Client Project/Site: PLU Pierce Canyon 17

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

MAMER

Authorized for release by: 10/31/2022 1:13:03 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....Links

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www.eurofinsus.com/Env
Released to Imaging: 2/3/2023 11:35:16 AM

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

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Client: Ensolum
Project/Site: PLU Pierce Canyon 17
Laboratory Job ID: 890-3296-1
SDG: 03E1558116

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Qualifier Description

Definitions/Glossary

Job ID: 890-3296-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Qualifiers

GC	VOA
Qual	ifier

*-	LCS and/or LCSD is outside acceptance limits, low biased.
*+	LCS and/or LCSD is outside acceptance limits, high biased.
*1	LCS/LCSD RPD exceeds control limits.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
S1-	Surrogate recovery exceeds control limits, low biased.

GC Semi VOA

U

Qualifier	Qualifier Description					
*_	LCS and/or LCSD is o					

*_	LCS and/or LCSD is outside acceptance limits, low biased.
F1	MS and/or MSD recovery exceeds control limits.
F2	MS/MSD RPD exceeds control limits
U	Indicates the analyte was analyzed for but not detected.

Indicates the analyte was analyzed for but not detected.

HPLC/IC Qualifier

U	Indicates the analyte was analyzed for but not detected.
U	indicates the analyte was analyzed for but not detected.
-	···

Qualifier Description

Glossary

Abbreviation	These commonly	y used abbreviations may	y 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	
CEL	Contains Front I guid	

CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid

ice)

Dil Fac	Dilution Facto

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 Method Quantitation Limit MQL

NC Not Calculated

Not Detected at the reporting limit (or MDL or EDL if shown) ND

NEG Negative / Absent Positive / Present POS 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)

Definitions/Glossary

Client: Ensolum Job ID: 890-3296-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Glossary (Continued)

Abbreviation These commonly used abbreviations may or may not be present in this report.

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3296-1

SDG: 03E1558116

Job ID: 890-3296-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3296-1

Receipt

The samples were received on 10/26/2022 2:58 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

Method 8021B: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-38022 and analytical batch 880-38059 recovered outside control limits for the following analytes: Benzene, Toluene, Ethylbenzene, m-Xylene & p-Xylene and o-Xylene.

Method 8021B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 880-38022 and analytical batch 880-38059 recovered outside control limits for the following analytes: Benzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-38061 and analytical batch 880-38058 was outside the upper control limits.

Method 8021B: The laboratory control sample (LCS) associated with preparation batch 880-38061 and analytical batch 880-38058 was outside acceptance criteria. Re-extraction and/or re-analysis could not be performed; therefore, the data have been reported. The batch matrix spike/matrix spike duplicate (MS/MSD) was within acceptance limits and may be used to evaluate matrix performance.

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

GC Semi VOA

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-38114 and analytical batch 880-38169 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8015MOD NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-38114 and analytical batch 880-38169 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.

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.

Lab Sample ID: 890-3296-1

Client Sample Results

Client: Ensolum Job ID: 890-3296-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: FS04A

Date Collected: 10/26/22 10:00 Date Received: 10/26/22 14:58

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *+ *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
Toluene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
Ethylbenzene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
m-Xylene & p-Xylene	<0.00398	U *1	0.00398	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
o-Xylene	< 0.00199	U *1	0.00199	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
Xylenes, Total	<0.00398	U *1	0.00398	mg/Kg		10/28/22 09:00	10/28/22 14:01	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			10/28/22 09:00	10/28/22 14:01	1
1,4-Difluorobenzene (Surr)	91		70 - 130			10/28/22 09:00	10/28/22 14:01	1
- Method: TAL SOP Total BTEX - 1	Γotal BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/28/22 17:21	1
Mathadi CW04C 004E NM Diag	al Dames Overen	:aa (DDO) (20)					
Method: SW846 8015 NM - Diese Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<u> </u>		49.8	 mg/Kg	_ <u>-</u>		10/31/22 12:28	1
	10.0	Ü	10.0	g/rtg			10/01/22 12:20	
Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	Result <49.8		49.8	mg/Kg	<u>D</u>	Prepared 10/28/22 15:48	Analyzed 10/30/22 23:30	
Gasoline Range Organics (GRO)-C6-C10		U *-			<u>D</u>			1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<49.8	U *-	49.8	mg/Kg	<u>D</u>	10/28/22 15:48	10/30/22 23:30	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8	U *-	49.8	mg/Kg	<u> </u>	10/28/22 15:48	10/30/22 23:30	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<49.8 <49.8	U*-	49.8	mg/Kg	<u>D</u>	10/28/22 15:48	10/30/22 23:30	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.8 <49.8 <49.8	U*-	49.8 49.8 49.8	mg/Kg	<u>D</u>	10/28/22 15:48 10/28/22 15:48 10/28/22 15:48	10/30/22 23:30 10/30/22 23:30 10/30/22 23:30	1 1 1 Dil Fac
	<49.8 <49.8 <49.8	U*-	49.8 49.8 49.8	mg/Kg	<u>D</u>	10/28/22 15:48 10/28/22 15:48 10/28/22 15:48 Prepared	10/30/22 23:30 10/30/22 23:30 10/30/22 23:30 Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.8 <49.8 <49.8 %Recovery	U *- U *- U	49.8 49.8 49.8 <i>Limits</i>	mg/Kg	<u>D</u>	10/28/22 15:48 10/28/22 15:48 10/28/22 15:48 Prepared 10/28/22 15:48	10/30/22 23:30 10/30/22 23:30 10/30/22 23:30 Analyzed 10/30/22 23:30	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.8 <49.8 <49.8 %Recovery	U *- U *- U	49.8 49.8 49.8 <i>Limits</i>	mg/Kg	<u>D</u>	10/28/22 15:48 10/28/22 15:48 10/28/22 15:48 Prepared 10/28/22 15:48	10/30/22 23:30 10/30/22 23:30 10/30/22 23:30 Analyzed 10/30/22 23:30	Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: FS05A

Date Collected: 10/26/22 10:50

Date Received: 10/26/22 14:58

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *+ *1	0.00200	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
Toluene	<0.00200	U *1	0.00200	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
Ethylbenzene	<0.00200	U *1	0.00200	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
m-Xylene & p-Xylene	<0.00399	U *1	0.00399	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
o-Xylene	<0.00200	U *1	0.00200	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
Xylenes, Total	<0.00399	U *1	0.00399	mg/Kg		10/28/22 09:00	10/28/22 15:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130			10/28/22 09:00	10/28/22 15:43	

Eurofins Carlsbad

Lab Sample ID: 890-3296-2

Matrix: Solid

Lab Sample ID: 890-3296-2

Job ID: 890-3296-1

Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: FS05A

Date Collected: 10/26/22 10:50 Date Received: 10/26/22 14:58

Sample Depth: 2

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	100	70 - 130	10/28/22 09:00	10/28/22 15:43	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/31/22 10:08	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 12:28	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *-	49.9	mg/Kg		10/28/22 15:48	10/30/22 23:50	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U *-	49.9	mg/Kg		10/28/22 15:48	10/30/22 23:50	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/28/22 15:48	10/30/22 23:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

1-Chioroociane
o-Terphenyl

	. 0. 20. 22 . 0 0	. 0, 00, 11 10.00	•
o-Terphenyl	10/28/22 15:48	10/30/22 23:50	1
1-Chlorooctane	10/28/22 15:48	10/30/22 23:50	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	38.3	4.96	mg/Kg			10/28/22 15:07	1

Client Sample ID: FS07A Lab Sample ID: 890-3296-3 **Matrix: Solid**

Date Collected: 10/26/22 10:55 Date Received: 10/26/22 14:58

Sample Depth: 2

Markland, CIMO 40 00	21B - Volatile Organic	O
IVIATOON' SVVXAN XII	21B - Volatile Circanic	L.Omnollings (Lat.)

momous official social	no organio comp	ounus (SS	,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
Toluene	<0.00201	U *-	0.00201	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/28/22 09:04	10/28/22 14:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			10/28/22 09:04	10/28/22 14:12	1
1 4 Diffuorabanzana (Surr)	00		70 120			10/20/22 00:04	10/20/22 14:12	1

4-Bromofluorobenzene (Surr)	115	70 - 130	10/28/22 09:04 10/28/22 14:1	2 1
1,4-Difluorobenzene (Surr)	99	70 - 130	10/28/22 09:04 10/28/22 14:1	2 1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/30/22 22:15	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/31/22 12:28	1

Lab Sample ID: 890-3296-3

Analyzed

10/28/22 15:13

Job ID: 890-3296-1

Client: Ensolum Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: FS07A

Date Collected: 10/26/22 10:55 Date Received: 10/26/22 14:58

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U *-	49.9	mg/Kg		10/28/22 15:48	10/31/22 00:10	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U *-	49.9	mg/Kg		10/28/22 15:48	10/31/22 00:10	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/28/22 15:48	10/31/22 00:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane						10/28/22 15:48	10/31/22 00:10	1
o-Terphenyl						10/28/22 15:48	10/31/22 00:10	1

Client Sample ID: SW01 Lab Sample ID: 890-3296-4 Date Collected: 10/26/22 11:00 **Matrix: Solid**

RL

5.01

Unit

mg/Kg

D

Prepared

Result Qualifier

69.2

Date Received: 10/26/22 14:58

Sample Depth: 0 - 2

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
Toluene	<0.00200	U *-	0.00200	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/28/22 09:04	10/28/22 14:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			10/28/22 09:04	10/28/22 14:38	1
1,4-Difluorobenzene (Surr)	92		70 - 130			10/28/22 09:04	10/28/22 14:38	1
Method: TAL SOP Total BTEX - T	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/30/22 22:15	1
-								
: Method: SW846 8015 NM - Diese		, , ,	GC)					
Method: SW846 8015 NM - Diese Analyte		ics (DRO) (GC)	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
		Qualifier	•	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 10/31/22 12:28	Dil Fac
Analyte		Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9	Qualifier Unics (DRO) Qualifier	RL 49.9 (GC)	mg/Kg			10/31/22 12:28	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U *-	RL 49.9 (GC)	mg/Kg		Prepared	10/31/22 12:28 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result 49.9 sel Range Orga Result <49.9 <49.9	Qualifier U nics (DRO) Qualifier U *-	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 10/28/22 15:48	10/31/22 12:28 Analyzed 10/31/22 00:30	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 49.9 sel Range Orga Result <49.9 <49.9	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 10/28/22 15:48	10/31/22 12:28 Analyzed 10/31/22 00:30	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 sel Range Orga Result <49.9 <49.9	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/28/22 15:48 10/28/22 15:48	10/31/22 12:28 Analyzed 10/31/22 00:30 10/31/22 00:30	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U nics (DRO) Qualifier U *- U *-	RL 49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/28/22 15:48 10/28/22 15:48 10/28/22 15:48	Analyzed 10/31/22 12:28 Analyzed 10/31/22 00:30 10/31/22 00:30	1 Dil Fac 1

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Dil Fac

Client Sample Results

Client: Ensolum Job ID: 890-3296-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Client Sample ID: SW01

Date Collected: 10/26/22 11:00 Date Received: 10/26/22 14:58

Sample Depth: 0 - 2

Lab Sample ID: 890-3296-4

Matrix: Solid

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	211	5.00	mg/Kg			10/28/22 15:20	1	

Client Sample ID: SW02 Lab Sample ID: 890-3296-5 **Matrix: Solid**

Date Collected: 10/26/22 12:20 Date Received: 10/26/22 14:58

Method: TAL SOP Total BTEX - Total BTEX Calculation

Result Qualifier

Sample Depth: 0 - 2

Analyte

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
Toluene	<0.00199	U *-	0.00199	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/28/22 09:04	10/28/22 15:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130			10/28/22 09:04	10/28/22 15:04	1
1,4-Difluorobenzene (Surr)	90		70 - 130			10/28/22 09:04	10/28/22 15:04	1

Total BTEX	<0.00398	U	0.00398	mg/Kg			10/30/22 22:15	1
Method: SW846 8015 NM - Diesel	Range Organi	ics (DRO) (0	GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/31/22 12:28	1
Method: SW846 8015B NM - Diese	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Unit

Prepared

Analyzed

Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U *-	50.0	mg/Kg		10/28/22 15:48	10/31/22 00:50	1
<50.0	U *-	50.0	mg/Kg		10/28/22 15:48	10/31/22 00:50	1
<50.0	U	50.0	mg/Kg		10/28/22 15:48	10/31/22 00:50	1
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
					10/28/22 15:48	10/31/22 00:50	1
					10/28/22 15:48	10/31/22 00:50	1
	<50.0 <50.0 <50.0	<50.0 U*- <50.0 U*-	<50.0 U*- 50.0 <50.0 U 50.0	<50.0 U*- 50.0 U*- 50.0 mg/Kg <50.0 U*- 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0 U *- 50.0 mg/Kg <50.0 U *- 50.0 mg/Kg <50.0 U 50.0 mg/Kg	<50.0	<50.0

Method: MCAWW 300.0 - Anions, Id	on Chromato	graphy - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.1		4.99	mg/Kg			10/28/22 15:40	1

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Dil Fac

Surrogate Summary

Client: Ensolum Job ID: 890-3296-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-20623-A-84-G MS	Matrix Spike	99	93	
880-20623-A-84-K MSD	Matrix Spike Duplicate	96	92	
880-20848-A-21-A MS	Matrix Spike	88	80	
880-20848-A-21-B MSD	Matrix Spike Duplicate	84	75	
890-3296-1	FS04A	88	91	
890-3296-2	FS05A	88	100	
890-3296-3	FS07A	115	99	
890-3296-4	SW01	102	92	
890-3296-5	SW02	100	90	
LCS 880-38022/1-A	Lab Control Sample	127	127	
LCS 880-38061/1-A	Lab Control Sample	110	106	
LCSD 880-38022/2-A	Lab Control Sample Dup	86	83	
LCSD 880-38061/2-A	Lab Control Sample Dup	108	100	
MB 880-38022/5-A	Method Blank	72	81	
MB 880-38061/6-A	Method Blank	62 S1-	89	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	, ,			

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID			
890-3296-1	FS04A			
890-3296-2	FS05A			
890-3296-3	FS07A			
890-3296-4	SW01			
890-3296-5	SW02			
MB 880-38114/1-A	Method Blank			
Surrogate Legend				
1CO = 1-Chlorooctane				
OTPH = o-Terphenyl				

Client: Ensolum Job ID: 890-3296-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-38022/5-A

Analysis Batch: 38059

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 38022

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/27/22 13:44	10/28/22 10:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/27/22 13:44	10/28/22 10:55	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/27/22 13:44	10/28/22 10:55	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	72		70 - 130	10/27/22	2 13:44	10/28/22 10:55	1
1,4-Difluorobenzene (Surr)	81		70 - 130	10/27/22	2 13:44	10/28/22 10:55	1

Spike

Added

0.100

0.100

0.100

0.200

0.100

LCS LCS

0.1306

0.1257

0.1232

0.2415

0.1175

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Lab Sample ID: LCS 880-38022/1-A

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 38059

Client Sample ID: Lab Control Sample

70 - 130

70 - 130

%Rec

131

126

123

121

117

Prep Type: Total/NA Prep Batch: 38022

Limits 70 - 130 70 - 130 70 - 130

	LCS		
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	127		70 - 130

Lab Sample ID: LCSD 880-38022/2-A

Matrix: Solid

Analysis Batch: 38059

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 38022

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08475	*1	mg/Kg		85	70 - 130	43	35
Toluene	0.100	0.08733	*1	mg/Kg		87	70 - 130	36	35
Ethylbenzene	0.100	0.08583	*1	mg/Kg		86	70 - 130	36	35
m-Xylene & p-Xylene	0.200	0.1612	*1	mg/Kg		81	70 - 130	40	35
o-Xylene	0.100	0.07790	*1	mg/Kg		78	70 - 130	41	35

LCSD LCSD

F2

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	86	70 - 130
1,4-Difluorobenzene (Surr)	83	70 - 130

Lab Sample ID: 880-20848-A-21-A MS

Matrix: Solid

Analysis Batch: 38059

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

Prep Batch: 38022

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U *+ *1 F1	0.0996	0.08214		mg/Kg		82	70 - 130	

Client: Ensolum Job ID: 890-3296-1 SDG: 03E1558116 Project/Site: PLU Pierce Canyon 17

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

Lab Sample ID: 880-20848-A-21-A MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 38059

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Toluene	<0.00200	U *1	0.0996	0.08676		mg/Kg		87	70 - 130	
Ethylbenzene	<0.00200	U *1	0.0996	0.08195		mg/Kg		82	70 - 130	
m-Xylene & p-Xylene	<0.00401	U *1	0.199	0.1543		mg/Kg		77	70 - 130	
o-Xylene	<0.00200	U *1 F1	0.0996	0.07423		mg/Kg		74	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	88		70 - 130
1,4-Difluorobenzene (Surr)	80		70 - 130

Lab Sample ID: 880-20848-A-21-B MSD

Matrix: Solid

Analysis Batch: 38059

Client Sample	ID: Matrix	Spike Du	piicate
	Date		4-I/NIA

Prep Type: Total/NA

Prep Batch: 38022

Prep Type: Total/NA Prep Batch: 38022

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U *+ *1 F1	0.0994	0.05518	F1 F2	mg/Kg		56	70 - 130	39	35
		F2									
Toluene	<0.00200	U *1	0.0994	0.07694		mg/Kg		77	70 - 130	12	35
Ethylbenzene	<0.00200	U *1	0.0994	0.08138		mg/Kg		82	70 - 130	1	35
m-Xylene & p-Xylene	<0.00401	U *1	0.199	0.1388		mg/Kg		70	70 - 130	11	35
o-Xylene	<0.00200	U *1 F1	0.0994	0.06437	F1	mg/Kg		64	70 - 130	14	35

MSD MSD

Surrogate	%Recovery Qu	alifier Limits	
4-Bromofluorobenzene (Surr)	84	70 - 130	
1,4-Difluorobenzene (Surr)	75	70 - 130	

Client Sample ID: Method Blank Lab Sample ID: MB 880-38061/6-A **Matrix: Solid**

Analysis Batch: 38058

Dron	Typo:	Total/NA

Prep Batch: 38061

Analyte	Result (Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201 U	J	0.00201	mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Toluene	<0.00201 U	J	0.00201	mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Ethylbenzene	<0.00201 U	J	0.00201	mg/Kg		10/28/22 09:04	10/28/22 11:36	1
m-Xylene & p-Xylene	<0.00402 U	J	0.00402	mg/Kg		10/28/22 09:04	10/28/22 11:36	1
o-Xylene	<0.00201 U	J	0.00201	mg/Kg		10/28/22 09:04	10/28/22 11:36	1
Xylenes, Total	<0.00402 L	U	0.00402	mg/Kg		10/28/22 09:04	10/28/22 11:36	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130	10/28/22 09:04	10/28/22 11:36	1
1,4-Difluorobenzene (Surr)	89		70 - 130	10/28/22 09:04	10/28/22 11:36	1

Lab Sample ID: LCS 880-38061/1-A

Matrix: Solid

Analysis Batch: 38058

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

Prep Batch: 38061

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.07369		mg/Kg	_	74	70 - 130	
Toluene	0.100	0.06319	*-	mg/Kg		63	70 - 130	

Client: Ensolum Job ID: 890-3296-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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

Lab Sample ID: LCS 880-38061/1-A

Client Sample ID: Lab Control Sample

Matrix: Solid

Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 38058

Prep Type: Total/NA

Prep Batch: 38061

Spike LCS LCS

*Rec

	Opino						/01 1CC
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	0.100	0.07103		mg/Kg		71	70 - 130
m-Xylene & p-Xylene	0.200	0.1424		mg/Kg		71	70 - 130
o-Xylene	0.100	0.07141		mg/Kg		71	70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 110
 70 - 130

 1,4-Difluorobenzene (Surr)
 106
 70 - 130

Lab Sample ID: LCSD 880-38061/2-A

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 38058 Prep Batch: 38061

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08194		mg/Kg		82	70 - 130	11	35
Toluene	0.100	0.07901		mg/Kg		79	70 - 130	22	35
Ethylbenzene	0.100	0.07690		mg/Kg		77	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.1545		mg/Kg		77	70 - 130	8	35
o-Xylene	0.100	0.07852		mg/Kg		79	70 - 130	9	35

 Surrogate
 %Recovery 4-Bromofluorobenzene (Surr)
 108
 70 - 130

 1,4-Diffuorobenzene (Surr)
 100
 70 - 130

<0.00398 U

93

Lab Sample ID: 880-20623-A-84-G MS

Matrix: Solid

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

Matrix: Solid Analysis Batch: 38058

m-Xylene & p-Xylene

1,4-Difluorobenzene (Surr)

Prep Batch: 38061 Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Limits Analyte Unit D %Rec Benzene <0.00199 U 0.0998 0.07938 mg/Kg 80 70 - 130 Toluene <0.00199 U *-0.0998 0.07727 mg/Kg 77 70 - 130 Ethylbenzene <0.00199 U 0.0998 0.07442 mg/Kg 75 70 - 130

0.1483

mg/Kg

74

70 - 130

70 - 130

0.200

70 - 130

Lab Sample ID: 880-20623-A-84-K MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 38058 Prep Batch: 38061

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.0990	0.08035		mg/Kg		81	70 - 130	1	35
Toluene	<0.00199	U *-	0.0990	0.07748		mg/Kg		78	70 - 130	0	35
Ethylbenzene	<0.00199	U	0.0990	0.07532		mg/Kg		76	70 - 130	1	35
m-Xylene & p-Xylene	<0.00398	U	0.198	0.1500		mg/Kg		76	70 - 130	1	35
o-Xylene	<0.00199	U	0.0990	0.07389		mg/Kg		75	70 - 130	1	35

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16

Client: Ensolum Job ID: 890-3296-1 SDG: 03E1558116 Project/Site: PLU Pierce Canyon 17

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

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

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

					Client Sa	•	
						Prep Type: 1	Total/NA
						Prep Batch	n: 38114
MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<50.0	U	50.0	mg/Kg		10/28/22 15:48	10/30/22 21:02	1
<50.0	U	50.0	mg/Kg		10/28/22 15:48	10/30/22 21:02	1
<50.0	U	50.0	mg/Kg		10/28/22 15:48	10/30/22 21:02	1
МВ	MB						
%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
					10/28/22 15:48	10/30/22 21:02	1
					10/28/22 15:48	10/30/22 21:02	1
	Result <50.0 <50.0 <50.0 MB	MB MB Result Qualifier <50.0	Result Qualifier RL	Result Qualifier RL Unit <50.0	Result Qualifier RL Unit D <50.0	MB MB Result Qualifier RL Unit D Prepared <50.0	Result Qualifier RL Unit D Prepared Analyzed <50.0

Lab Sample ID: LCS 880-38114/2-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA Analysis Batch: 38169 Prep Batch: 38114

Spike LCS LCS Result Qualifier Added Analyte Limits Unit %Rec 51000 990.8 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 51000 Diesel Range Organics (Over 966.7 *mg/Kg 2 70 - 130

Lab Sample ID: LCSD 880-38114/3-A

Matrix: Solid

C10-C28)

Analysis Batch: 38169							Pre	p Batch:	38114
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	51000	819.4	*_	mg/Kg		2	70 - 130	19	20
(GRO)-C6-C10									
Diesel Range Organics (Over	51000	888.9	*-	mg/Kg		2	70 - 130	8	20
C10-C28)									

Lab Sample ID: 890-3298-A-1-G MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 38169

Prep Batch: 38114 Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <49.8 U *- F1 50900 1020 F1 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.8 U*-F1F2 50900 674.4 F1 mg/Kg 70 - 130

C10-C28)

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Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Job ID: 890-3296-1 Client: Ensolum Project/Site: PLU Pierce Canyon 17

SDG: 03E1558116

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

Lab Sample ID: 890-3298-A-1-H MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 38169 Prep Batch: 38114

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *- F1	50900	1028	F1	mg/Kg		2	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<49.8	U *- F1 F2	50900	841.7	F1 F2	mg/Kg		2	70 - 130	22	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-38086/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

MB MB Analyte Result Qualifier RL Unit D Dil Fac Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 10/28/22 13:27

Lab Sample ID: LCS 880-38086/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit %Rec Limits Chloride 250 257.4 103 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-38086/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit %Rec RPD Limit Chloride 250 258.0 mg/Kg 103 90 - 110 0

Lab Sample ID: 890-3296-4 MS Client Sample ID: SW01 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec Chloride 211 250 90 - 110 449.6 95 mg/Kg

Lab Sample ID: 890-3296-4 MSD Client Sample ID: SW01 **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 38100

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Qualifier %Rec Limits RPD Result Unit D Limit Chloride 211 250 449.8 95 90 - 110 mg/Kg 0 20

QC Association Summary

Client: Ensolum Job ID: 890-3296-1
Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

GC VOA

Prep Batch: 38022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Total/NA	Solid	5035	
890-3296-2	FS05A	Total/NA	Solid	5035	
MB 880-38022/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38022/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38022/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20848-A-21-A MS	Matrix Spike	Total/NA	Solid	5035	
880-20848-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38058

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-3	FS07A	Total/NA	Solid	8021B	38061
890-3296-4	SW01	Total/NA	Solid	8021B	38061
890-3296-5	SW02	Total/NA	Solid	8021B	38061
MB 880-38061/6-A	Method Blank	Total/NA	Solid	8021B	38061
LCS 880-38061/1-A	Lab Control Sample	Total/NA	Solid	8021B	38061
LCSD 880-38061/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38061
880-20623-A-84-G MS	Matrix Spike	Total/NA	Solid	8021B	38061
880-20623-A-84-K MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38061

Analysis Batch: 38059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Total/NA	Solid	8021B	38022
890-3296-2	FS05A	Total/NA	Solid	8021B	38022
MB 880-38022/5-A	Method Blank	Total/NA	Solid	8021B	38022
LCS 880-38022/1-A	Lab Control Sample	Total/NA	Solid	8021B	38022
LCSD 880-38022/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	38022
880-20848-A-21-A MS	Matrix Spike	Total/NA	Solid	8021B	38022
880-20848-A-21-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	38022

Prep Batch: 38061

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-3	FS07A	Total/NA	Solid	5035	
890-3296-4	SW01	Total/NA	Solid	5035	
890-3296-5	SW02	Total/NA	Solid	5035	
MB 880-38061/6-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38061/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38061/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20623-A-84-G MS	Matrix Spike	Total/NA	Solid	5035	
880-20623-A-84-K MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 38132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Total/NA	Solid	Total BTEX	
890-3296-2	FS05A	Total/NA	Solid	Total BTEX	
890-3296-3	FS07A	Total/NA	Solid	Total BTEX	
890-3296-4	SW01	Total/NA	Solid	Total BTEX	
890-3296-5	SW02	Total/NA	Solid	Total BTEX	

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QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17

Job ID: 890-3296-1 SDG: 03E1558116

GC Semi VOA

Prep Batch: 38114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Total/NA	Solid	8015NM Prep	
890-3296-2	FS05A	Total/NA	Solid	8015NM Prep	
890-3296-3	FS07A	Total/NA	Solid	8015NM Prep	
890-3296-4	SW01	Total/NA	Solid	8015NM Prep	
890-3296-5	SW02	Total/NA	Solid	8015NM Prep	
MB 880-38114/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-38114/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-38114/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3298-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3298-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 38169

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Total/NA	Solid	8015B NM	38114
890-3296-2	FS05A	Total/NA	Solid	8015B NM	38114
890-3296-3	FS07A	Total/NA	Solid	8015B NM	38114
890-3296-4	SW01	Total/NA	Solid	8015B NM	38114
890-3296-5	SW02	Total/NA	Solid	8015B NM	38114
MB 880-38114/1-A	Method Blank	Total/NA	Solid	8015B NM	38114
LCS 880-38114/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	38114
LCSD 880-38114/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	38114
890-3298-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	38114
890-3298-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	38114

Analysis Batch: 38267

Lab Sample ID 890-3296-1	Client Sample ID FS04A	Prep Type Total/NA	Matrix Solid	Method 8015 NM	Prep Batch
890-3296-2	FS05A	Total/NA	Solid	8015 NM	
890-3296-3	FS07A	Total/NA	Solid	8015 NM	
890-3296-4	SW01	Total/NA	Solid	8015 NM	
890-3296-5	SW02	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 38086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Soluble	Solid	DI Leach	_
890-3296-2	FS05A	Soluble	Solid	DI Leach	
890-3296-3	FS07A	Soluble	Solid	DI Leach	
890-3296-4	SW01	Soluble	Solid	DI Leach	
890-3296-5	SW02	Soluble	Solid	DI Leach	
MB 880-38086/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-38086/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-38086/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3296-4 MS	SW01	Soluble	Solid	DI Leach	
890-3296-4 MSD	SW01	Soluble	Solid	DI Leach	

Analysis Batch: 38100

Released to Imaging: 2/3/2023 11:35:16 AM

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-1	FS04A	Soluble	Solid	300.0	38086
890-3296-2	FS05A	Soluble	Solid	300.0	38086

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QC Association Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
SDG: 03E1558116

HPLC/IC (Continued)

Analysis Batch: 38100 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3296-3	FS07A	Soluble	Solid	300.0	38086
890-3296-4	SW01	Soluble	Solid	300.0	38086
890-3296-5	SW02	Soluble	Solid	300.0	38086
MB 880-38086/1-A	Method Blank	Soluble	Solid	300.0	38086
LCS 880-38086/2-A	Lab Control Sample	Soluble	Solid	300.0	38086
LCSD 880-38086/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	38086
890-3296-4 MS	SW01	Soluble	Solid	300.0	38086
890-3296-4 MSD	SW01	Soluble	Solid	300.0	38086

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13

Initial

Amount

5.03 g

5 mL

10.04 g

1 uL

5.04 g

50 mL

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

50 mL

38114

38169

38086

38100

Client Sample ID: FS04A

Project/Site: PLU Pierce Canyon 17

Client: Ensolum

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Lab Sample ID: 890-3296-1

Matrix: Solid

EET MID

EET MID

FFT MID

EET MID

Date Collected: 10/26/22 10:00 Date Received: 10/26/22 14:58

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

Batch

Method

5035

8021B

Total BTEX

8015NM Prep

8015B NM

DI Leach

300.0

8015 NM

Batch	Prepared		
Number	or Analyzed	Analyst	Lab
38022	10/28/22 09:00	MNR	EET MID
38059	10/28/22 14:01	AJ	EET MID
38132	10/28/22 17:21	AJ	EET MID
38267	10/31/22 12:28	AJ	EET MID

DM

ΑJ

SMC

SMC

10/28/22 15:48

10/30/22 23:30

10/28/22 10:55

10/28/22 15:00

Client Sample ID: FS05A Lab Sample ID: 890-3296-2

Dil

1

1

Factor

Run

Date Collected: 10/26/22 10:50 **Matrix: Solid**

Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	38022	10/28/22 09:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38059	10/28/22 15:43	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			38132	10/31/22 10:08	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38267	10/31/22 12:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38114	10/28/22 15:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38169	10/30/22 23:50	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	38086	10/28/22 10:55	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38100	10/28/22 15:07	SMC	EET MID

Client Sample ID: FS07A Lab Sample ID: 890-3296-3 Date Collected: 10/26/22 10:55 **Matrix: Solid**

Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 14:12	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38132	10/30/22 22:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38267	10/31/22 12:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	38114	10/28/22 15:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38169	10/31/22 00:10	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	38086	10/28/22 10:55	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38100	10/28/22 15:13	SMC	EET MID

Client Sample ID: SW01 Lab Sample ID: 890-3296-4

Date Collected: 10/26/22 11:00 Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 14:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38132	10/30/22 22:15	AJ	EET MID

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Matrix: Solid

Client: Ensolum
Project/Site: PLU Pierce Canyon 17

Job ID: 890-3296-1
SDG: 03E1558116

Client Sample ID: SW01 Lab Sample ID: 890-3296-4

Date Collected: 10/26/22 11:00 Matrix: Solid
Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			38267	10/31/22 12:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	38114	10/28/22 15:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38169	10/31/22 00:30	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	38086	10/28/22 10:55	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38100	10/28/22 15:20	SMC	EET MID

Client Sample ID: SW02 Lab Sample ID: 890-3296-5

Date Collected: 10/26/22 12:20 Matrix: Solid

Date Received: 10/26/22 14:58

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	38061	10/28/22 09:04	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	38058	10/28/22 15:04	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			38132	10/30/22 22:15	AJ	EET MID
Total/NA	Analysis	8015 NM		1			38267	10/31/22 12:28	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	38114	10/28/22 15:48	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	38169	10/31/22 00:50	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	38086	10/28/22 10:55	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	38100	10/28/22 15:40	SMC	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum
Project/Site: PLU Pierce Canyon 17
SDG: 03E1558116

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
,		t the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
the agency does not of	fer certification.			
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	
0 ,		Matrix Solid	Analyte Total TPH	

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Method Summary

Client: Ensolum Job ID: 890-3296-1 Project/Site: PLU Pierce Canyon 17 SDG: 03E1558116

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	MCAWW	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

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

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU Pierce Canyon 17

Job ID: 890-3296-1

SDG: 03E1558116

1558116	

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3296-1	FS04A	Solid	10/26/22 10:00	10/26/22 14:58	2
890-3296-2	FS05A	Solid	10/26/22 10:50	10/26/22 14:58	2
890-3296-3	FS07A	Solid	10/26/22 10:55	10/26/22 14:58	2
890-3296-4	SW01	Solid	10/26/22 11:00	10/26/22 14:58	0 - 2
890-3296-5	SW02	Solid	10/26/22 12:20	10/26/22 14:58	0 - 2

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City, State ZIP:

Carlsbad, NM 88220 3122 National Parks Hwy

City, State ZIP: Address: Company Name Bill to: (if different)

Carlsbad, NM 88220 3104 E. Green St XTO Energy Garrett Green

Reporting: Level III 🗌 Level III 📗 PST/UST 📗 TRRP 📗

Level IV

State of Project:

Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐

Work Order Comments

www.xenco.com

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Project Manager: Company Name: Address:

> Ensolum Ben Belli

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300

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

Phone: 303	303-887-2946		Email: Garrett	anett Greeni	ЭЕххог	Mobil	COM	Delivera	Deliverables: EDD	Other
Project Name:	PLU Pierce Canyon 17	anyon 17	Turn Around	round				ANALYSIS REQUEST	P	Preservative Codes
Project Number:	03E1558116	8116	Routine	Rush	Pres.	Н	Н		None: NO	NO DI Water: H ₂ O
Project Location:			Due Date:	2 day					Cool: Cool	
Sampler's Name:	Connor Whitman	hitman	TAT starts the day received by	day received by					НСГ: НС	HNO ₃ : HN
PO #		/	the lab, if received by 4:30pm	ved by 4:30pm	rs	H	_		H ₂ S0 ₄ : H ₂	H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank:	No No	Wet Ice:	Yes No	nete))			H₃PO₄: HP	HP
Samples Received Intact:	(Yes) No	Thermometer ID:	M	Food	aran	300.0			Natisc	NaHSO ₄ : NABIS
Cooler Custody Seals:	Yes No MA	A Correction Factor	ctor:	ること	Pa	PA: 3			Na ₂ S ₂ (Na ₂ S ₂ O ₃ ; NaSO ₃
Sample Custody Seals:	Yes No NA		Reading:	77.69		(EF)	890-3296 Chain of Custody		Zn Acetate+NaOH: Zn
Total Containers:		Corrected Temperature:	nperature:	5.6			-			NaOH+Ascorbic Acid: SAPC
Sample Identification	ation Matrix	rix Date Sampled	Time	Depth Grab/	# of	TPH (80	BTEX (8		G	Sample Comments
F504A	5	10/20/22	10:00	2' C	1	\			Incident ID:	int ID:
FSOSA	2		10:50	2' 0	1		/		nAPP	nAPP2223832773
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Circle Method(s) and Metal(s) to be analyzed	Metal(s) to be an	alyzed	TCLP / SPL	TCLP / SPLP 6010: 8RCRA		AS E	За Ве	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Ag TI U Hg: 1631/245.1/7470/7471	/7470 /7471
Notice: Signature of this document of service. Eurofins Xenco will	ment and relinquishme I be liable only for the	ent of samples constituted to each of samples and the applied to each or	tutes a valid purch shall not assume a	ase order from cits iny responsibility f	int compa or any los	ny to Eur	rofins Xe (penses i	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 the	andard terms and conditions umstances beyond the control reed unless previously negotiated.	
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Revised Date: 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3296-1

SDG Number: 03E1558116

Login Number: 3296 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3296-1 SDG Number: 03E1558116

Login Number: 3296 **List Source: Eurofins Midland** List Number: 2 List Creation: 10/28/22 10:29 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").



APPENDIX E

NMOCD Notifications

From: <u>Kalei Jennings</u>

To: Ben Belill; Tacoma Morrissey

Subject: FW: XTO - Sampling Notification (Week of 9/26/22 - 9/30/22)

Date: Friday, September 23, 2022 5:07:05 PM

Attachments: image001.png

image002.png image003.png image004.png

FYI



Kalei Jennings

Senior Scientist 817-683-2503 Ensolum, LLC

From: Green, Garrett J <garrett.green@exxonmobil.com>

Sent: Friday, September 23, 2022 3:52 PM

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us; Hamlet, Robert, EMNRD

<Robert.Hamlet@state.nm.us>

Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Kalei Jennings

<kjennings@ensolum.com>

Subject: XTO - Sampling Notification (Week of 9/26/22 - 9/30/22)

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of September 26, 2022.

Monday

- PLU 184H / nAPP2219648561

Tuesday

PLU 184H / nAPP2219648561

Wednesday

- PLU PC 17 / NAPP2223832773

Thursday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 411/ nAPP2219646774

Friday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 411/ nAPP2219646774

Thank you!

Garrett Green

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

XTO Energy, Inc.

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

From: Green, Garrett J

To: ocd.enviro@emnrd.nm.gov; Hamlet, Robert, EMNRD; Bratcher, Michael, EMNRD

Cc: <u>DelawareSpills /SM; Tacoma Morrissey</u>

Subject: XTO - Sampling Notification (Week of 10/24/22 - 10/28/22)

Date: Friday, October 21, 2022 1:10:30 PM

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of Oct 24, 2022.

Monday

Elk Wallow CDP/ nAPP2223831434

Tuesday

Elk Wallow CDP/ nAPP2223831434

Wednesday

- PLU PC 17/ nAPP2223832773

Thursday

- JRU DI 11 Ekalaka 823H/ nAPP2224527297
- Poker Lake Unit 409/ nAPP2223751933
- PLU 27 Brushy Draw 167H / nAPP2222741514

Friday

- JRU DI 11 Ekalaka 823H/ nAPP2224527297
- Poker Lake Unit 409/ nAPP2223751933
- PLU 27 Brushy Draw 167H / nAPP2222741514

Thank you!

Garrett Green

Environmental Coordinator Delaware Business Unit (575) 200-0729

Garrett.Green@ExxonMobil.com

XTO Energy, Inc.

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

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone: (575) 748-1283 Fax: (575) 748-9720

District III 1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

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 157796

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	157796
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Create	ondition	Condition Date
rhar	We have received your closure report and final C-141 for Incident #NAPP2223832773 PLU PIERCE CANYON 17 TANK BATTERY, thank you. This closure is approved.	2/3/2023