State of New Mexico Incident ID NAPP2211

Incident ID	NAPP2211651017
District RP	
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Closure

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

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

A scaled site and sampling diagram as described in 19.15.29.	11 NMAC		
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office		
☐ 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 DCD when reclamation and re-vegetation are complete. Title: _Environmental Coordinator		
OCD Only	09/22/2022		
Jocelyn Harimon Received by:			
Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.			
Closure Approved by: Robert Hamlet	Date: 12/13/2022		
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	NAPP2211651017
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy				OGRID 5	5380
Contact Name Adrian Baker				Contact Te	elephone 432-236-3808
Contact ema	^{il} adrian.bak	er@exxonmobil.co	om	Incident #	(assigned by OCD)
Contact mail	ling address	6401 Holiday Hill	Rd Bldg 5, Midla	nd, Texas, 79707	
			Location	of Release So	ource
Latitude 32	10923			Longitude	-103.88871
			(NAD 83 in dec	cimal degrees to 5 decim	nal places)
Site Name	PLU 21 Brus	shy Draw 123H		Site Type	Production Well
Date Release				API# (if app	olicable)
Unit Letter	Section	Township	Range	Coun	ntv.
		•			<u>·</u>
N	21	25S	30E	Eddy	<u>y</u>
Surface Owne	r: State	☐ Federal ☐ Tr	ribal 🗷 Private (1	Name: Janey Paso	chal)
			NI - 4	J X7 - L	D.J
			Nature and	d Volume of F	Kelease
				calculations or specific	justification for the volumes provided below)
Crude Oi	1	Volume Release	d (bbls)		Volume Recovered (bbls)
Produced	Water	Volume Release	d (bbls)		Volume Recovered (bbls)
			ion of total dissolwater >10,000 mg	\ /	☐ Yes ☐ No
Condensa	ate	Volume Release		y1;	Volume Recovered (bbls)
☐ Natural C	Gas	Volume Release	d (Mcf)		Volume Recovered (Mcf)
X Other (de	escribe)	Volume/Weight	Released (provide	e units)	Volume/Weight Recovered (provide units)
Produced Water w/FR 10.00 BBLS			2.00 BBLS		
Cause of Rel	ease Commi	inication loss with	blender during fr	ac operations cause	ed a release of fluids both to containment and pad. All
	free flu	ids were recovered	l. A third-party co	ontractor has been re	retained for remediation purposes.
1					

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Was this a major release as defined by 19.15.29.7(A) NMAC?	If YES, for what reason(s) does the respon	sible party consider this a major release?
Yes 🗷 No		
If YES, was immediate no N/A	otice given to the OCD? By whom? To wh	om? When and by what means (phone, email, etc)?
	Initial Re	esponse
The responsible	party must undertake the following actions immediately	y unless they could create a safety hazard that would result in injury
The source of the rele	ease has been stopped.	
➤ The impacted area ha	as been secured to protect human health and	the environment.
▼ Released materials have a released materials have a released materials.	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.
∡ All free liquids and re	ecoverable materials have been removed and	l managed appropriately.
If all the actions described	d above have <u>not</u> been undertaken, explain v	vhy:
NA		
has begun, please attach	a narrative of actions to date. If remedial e	emediation immediately after discovery of a release. If remediation efforts have been successfully completed or if the release occurred lease attach all information needed for closure evaluation.
regulations all operators are public health or the environr failed to adequately investig addition, OCD acceptance o and/or regulations.	required to report and/or file certain release notified ment. The acceptance of a C-141 report by the O gate and remediate contamination that pose a threat of a C-141 report does not relieve the operator of a C-141 report does	pest of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger CD does not relieve the operator of liability should their operations have at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
Printed Name: Adrian Ba	aker	Title: SSHE Coordinator
Signature:	Chlor	Date: 4/26/22
email: adrian.baker@exx	conmobil.com	Telephone: 432-236-3808
OCD Only		
Received by:Jocelyn	Harimon	Date: 04/26/2022

Location:	PLU 21 Brushy Draw 123H	
Spill Date:	4/15/2022	
	Area 1	
Approximate A	rea = 11.23	sq. ft.
	VOLUME OF LEAK	
Total Crude Oil	= 0.00	bbls
Total Produced	Water = 2.00	bbls
	Area 2	-
Approximate A	rea = 4490.00	sq. ft.
Average Saturation (or depth) of spill =		inches
Average Deresi	ty Factor = 0.03	П
Average Porosi	ty Factor = U.U.S	1
	VOLUME OF LEAK	
Total Crude Oil	= 0.00	bbls
Total Produced	Water = 8.00	bbls

TOTAL VOLUME OF LEAK			
Total Crude Oil =	0.00	bbls	
Total Produced Water =	10.00	bbls	
TOTAL VOLUME RECOVERED			
Total Crude Oil =	0.00	bbls	
Total Produced Water =	2.00	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 101682

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	101682
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
jharimon	None	4/26/2022

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Incident ID	NAPP2211651017	
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Site Assessment/Characterization

This information must be provided to the appropriate district office no later than 90 days after the release discovery date.		
What is the shallowest depth to groundwater beneath the area affected by the release?	> 100 (ft bgs)	
Did this release impact groundwater or surface water?	☐ Yes ⊠ No	
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	X 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?	X 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.		

Characterization Report Checklist: Each of the following items must be included in the report.
<u></u>
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: 9/21/2022 3:08:06 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division

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			7

Incident ID	NAPP2211651017
District RP	
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Application ID	

regulations all operators are required to report and/or file certain public health or the environment. The acceptance of a C-141 re failed to adequately investigate and remediate contamination that	replete to the best of my knowledge and understand that pursuant to OCD rules and a release notifications and perform corrective actions for releases which may endanger port by the OCD does not relieve the operator of liability should their operations have at pose a threat to groundwater, surface water, human health or the environment. In experience of responsibility for compliance with any other federal, state, or local laws
Printed Name: _Garrett Green	Title: _Environmental Coordinator
Signature: Satt Sur	Date:09/21/2022
email: _garrett.green@exxonmobil.com	Telephone:575-200-0729
OCD Only	
Received by:Jocelyn Harimon	Date:09/22/2022

State of New Mexico

Incident ID	NAPP2211651017
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 must be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office
☐ 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 certar 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 OCD when reclamation and re-vegetation are complete. Title: _Environmental Coordinator
OCD Only	09/22/2022
Jocelyn Harimon Received by:	
	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:	Date:
Printed Name:	Title:



September 21, 2022

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

Re: Closure Request

PLU 21 Brushy Draw 104H, 123H, and 124H Incident Numbers NAPP2209736479, NAPP2211151438, and NAPP2211651017 Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities at the PLU 21 Brushy Draw 104H, 123H, and 124H (Site). The purpose of the site assessment, excavation, and soil sampling activities was to address impacts to soil resulting from three separate releases of produced water with friction reducer onto the well pad. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request, describing remediation that has occurred and requesting closure for the following Incident Numbers NAPP2209736479, NAPP2211151438, and NAPP2211651017.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit N, Section 21, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10934° N, 103.88918° W) and is associated with oil and gas exploration and production operations on Private Land.

Incident Number NAPP2209736479

On March 25, 2022, during hydraulic fracturing operations, the packing on two pumps and a hose failed resulting in the release of approximately 45.0 barrels (bbls) of produced water, treated with friction reducer, into a temporary containment and onto the Site pad. Approximately 40.0 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on March 25, 2022 and submitted a Release Notification Form C-141 (Form C-141) on April 7, 2022. The release was assigned Incident Number NAPP2209736479.

Incident Number NAPP2211151438

On April 8, 2022, during hydraulic fracturing operations, a blender failed resulting in the release of approximately 15.0 bbls of produced water, treated with friction reducer, into a temporary containment and onto the Site pad. Approximately 12.0 bbls of released fluids were recovered. XTO reported the

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 601 North Marienfield , Suite 400 | Midland, TX 78209 | ensolum.com Texas PG Firm No. 50588 | Texas PE Firm No. F-21843



release to the NMOCD on a Form C-141 on April 21, 2022. The release was assigned Incident Number NAPP2211151438.

Incident Number NAPP2211651017

On April 15, 2022, during hydraulic fracturing operations, communication loss with a blender resulted in the release of approximately 10.0 bbls of produced water, treated with friction reducer, into a temporary containment and onto the Site pad. Approximately 2.0 bbls of released fluids were recovered. XTO reported the release to the NMOCD on a Form C-141 on April 26, 2022. The release was assigned Incident Number NAPP2211651017.

Produced water is recycled through filtering and separation, then mixed in a blender with friction reducer and used as hydraulic fracturing fluid during the well completion process. The three release areas overlapped and were addressed concurrently. The temporary liners were removed prior to beginning Site assessment activities. As such, liner inspections could not be completed. The release extent (combined) was identified based on information provided on the Form C-141 and visual observations.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Table 1, Closure Criteria for Soils Impacted by a Release, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization. Potential site receptors are identified on Figure 1.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320628103533001, located approximately 0.18 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 264 feet bgs and a total depth of 288 feet bgs. Ground surface elevation at the groundwater well location is 3,207 feet above mean sea level (amsl), which is approximately 28 feet lower in elevation than the Site. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 186 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 not 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).

Based on the proximity of the nearby intermittent dry wash and water well, the following NMOCD Table 1 Closure Criteria (Closure Criteria) apply:

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



SITE ASSESSMENT ACTIVITIES

On June 17, 2022, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the Form C-141s and visual observations. Four preliminary soil samples (SS01 through SS04) were collected within and around (SS04) the release extent at a depth of approximately 0.5 feet bgs to assess surficial soil within the release extent. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary 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 BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-(diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for preliminary soil samples SS01 through SS04 indicated TPH and chloride concentrations exceeded the Closure Criteria. Based on visible staining within the release extent, elevated field screening results, and laboratory analytical results for the preliminary soil samples, excavation and delineation activities appeared warranted.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

Between August 31, 2022 and September 2, 2022, Ensolum personnel were at the Site to oversee delineation and excavation activities. Delineation samples from potholes PH01 through PH04 were advanced via trackhoe in the vicinity of the four preliminary soil sample locations, respectively, that were collected within the release extent to assess the vertical extent of the release; depths ranged from 1-foot to 2 feet bgs. Soil from the delineation samples was only field screened for volatile aromatic hydrocarbons and chloride; soil samples for laboratory analysis were not collected or submitted since excavation activites were to proceed delineation activites. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The potholes and delineation soil sample locations are depicted on Figure 2.

Impacted soil was excavated from the release extent as indicated by visible staining, field screening activities for potholes PH01 through PH04, and laboratory analytical results of preliminary soil samples SS01 through SS04. Excavation activities were performed using a trackhoe, backhoe and transport vehicles. To direct excavation activities, Ensolum personnel screened soil for volatile aromatic hydrocarbons and chloride. Following removal of impacted soil, Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS28 were collected from the floor of the excavation at depths ranging from 2 feet to 3 feet bgs. Composite soil samples SW01 through SW04 were collected from the sidewall of the excavation at depths ranging from ground surface to 3 feet bgs. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 5,600 square feet. A total of approximately 440 cubic yards of impacted soil was removed during the excavation activities. The impacted soil was



transported and properly disposed of at the R360 Facility in Hobbs, New Mexico. After completion of confirmation sampling, the excavation area was secured with fencing.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for the excavation floor soil samples FS01 through FS28 and sidewall soil samples SW01 through SW04 indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Closure Criteria. Laboratory analytical results for excavation floor soil sample FS18 at 2 feet bgs initially indicated minimal concentrations of TPH exceeded the Site Closure Criteria. On September 15, 2022, Ensolum personnel returned to the Site to re-collect composite soil sample FS18, in which the subsequent laboratory analytical results were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D.

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address the March 25, 2022, April 8, 2022, and April 15, 2022, releases of produced water treated with friction reducer. Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH, and chloride concentrations were compliant with the Site Closure Criteria. Based on the soil sample analytical results, no further remediation appears required at this time. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. Notifications to NMOCD regarding sampling events are included in Appendix E. The Safety Data Sheet (SDS) for friction reducer is provided in Appendix F.

Excavation of impacted soil has mitigated impacts at this Site and depth to groundwater has been estimated to be greater than 100 feet bgs. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Numbers NAPP2209736479, NAPP2211151438 and NAPP2211651017.

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

Sincerely, **Ensolum, LLC**

Benjamin J. Belill Project Geologist Ashley L. Ager, M.S., PG Program Director

ashley L. ager

cc: Garrett Green, XTO

Shelby Pennington, XTO

D. Delill

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

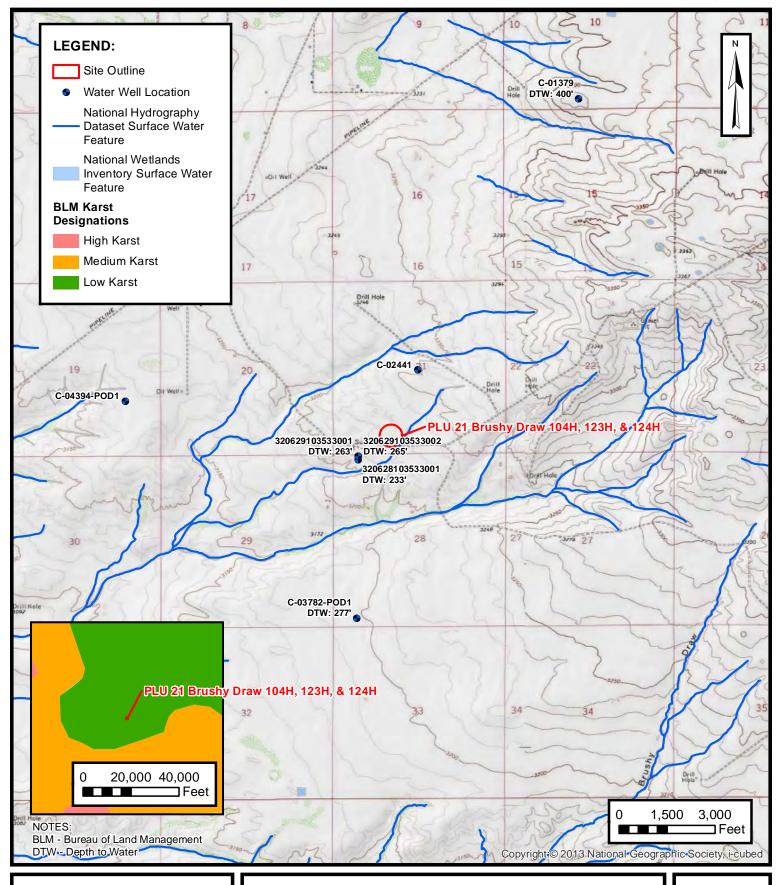
Appendix C Lithologic / Soil Sampling Logs

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

Appendix E NMOCD Notifications Appendix F Friction Reducer SDS



FIGURES

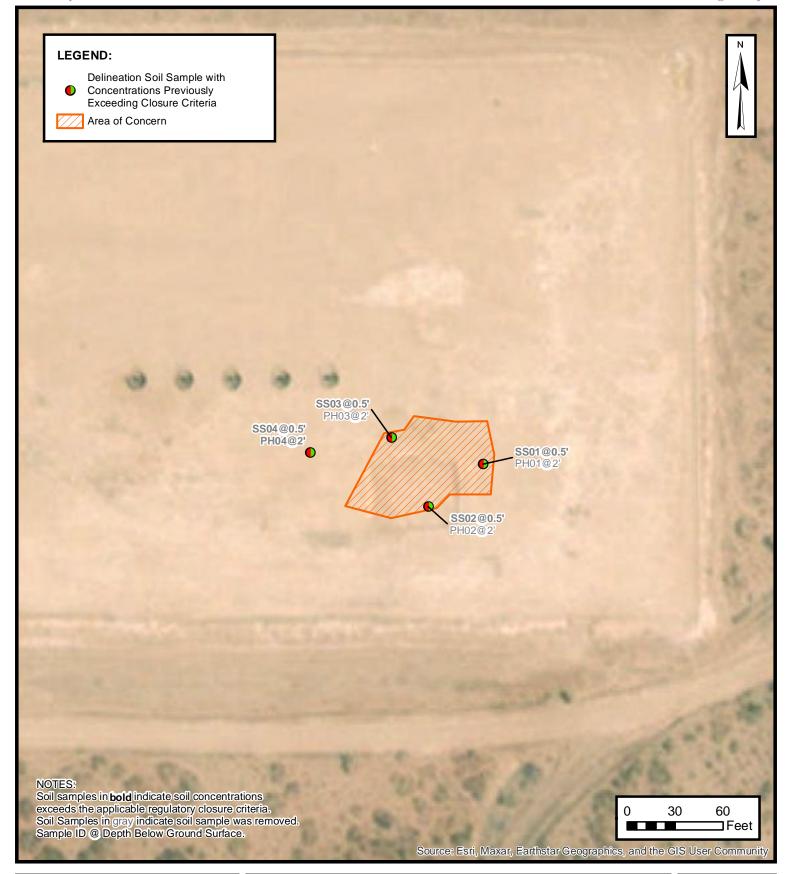




SITE RECEPTOR MAP

XTO ENERGY, INC
PLU 21 BRUSHY DRAW 104H, 123H & 124H
nAPP2209736479, nAPP2211651017, nAPP2211151438
Unit N, Sec 21, T25S, R30E
Eddy County, New Mexico

FIGURE

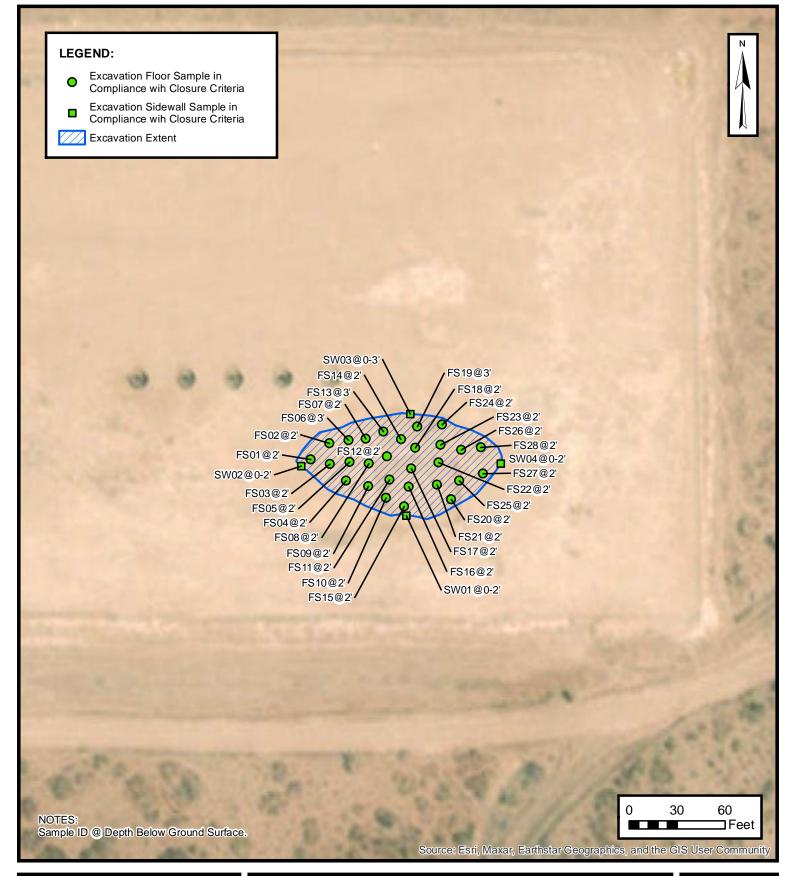




DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
PLU 21 BRUSHY DRAW 104H, 123H, & 124H
nAPP2209736479, nAPP2211651017, nAPP2211151438
Unit N, Sec 21, T25S, R30E
Eddy County, New Mexico

FIGURE





EXCAVATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
PLU 21 BRUSHY DRAW 104H, 123H & 124H
nAPP2209736479, nAPP2211651017, nAPP2211151438
Unit N, Sec 21, T25S, R30E
Eddy County, New Mexico

FIGURE



TABLES



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS PLU 21 Brushy Draw 104H, 123H, & 124H 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 C	Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600			
	Delineation Soil Samples												
SS01	06/17/2022	0.5	<0.00199	<0.00398	125	7,380	<49.9	7,505	7,510	41,500			
PH01	08/31/2022	2	<0.00200	< 0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	259			
SS02	06/17/2022	0.5	<0.00199	<0.00398	<49.9	3,910	1,160	3,910	5,070	16,900			
PH02	08/31/2022	2	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	51.7			
SS03	06/17/2022	0.5	<0.00200	<0.00399	279	7,120	4,390	7,399	11,800	31,300			
PH03	08/31/2022	2	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	541			
SS04	06/17/2022	0.5	<0.00199	<0.00398	<50.0	115	177	115	292	12,600			
PH04	08/31/2022	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	644			
				Con	firmation Soil Sa	mples							
FS01	09/01/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	219			
FS02	09/01/2022	2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	328			
FS03	09/01/2022	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	103			
FS04	09/01/2022	2	<0.00202	<0.00403	55.9	<49.8	<49.8	55.9	55.9	333			
FS05	09/01/2022	2	<0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	329			
FS06	09/02/2022	3	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	430			
FS07	09/02/2022	3	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	369			
FS08	09/01/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	354			
FS09	09/01/2022	2	<0.00200	<0.00400	<50.0	<50.0	<50.0	<50.0	<50.0	56.7			
FS10	09/01/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	92.3			
FS11	09/01/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	181			
FS12	09/01/2022	2	<0.00198	<0.00397	<50.0	<50.0	<50.0	<50.0	<50.0	238			
FS13	09/02/2022	3	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	392			
FS14	09/02/2022	3	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	369			
FS15	09/02/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	249			
FS16	09/02/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	283			
FS17	09/02/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	119			
FS18	09/02/2022	2	<0.00200	<0.00399	<50.0	175	<50.0	175	175	167			
FS18	09/15/2022	2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	237			
FS19	09/02/2022	3	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	99.9			
FS20	09/02/2022	2	0.00336	0.00812	<49.9	<49.9	<49.9	<49.9	<49.9	52.5			
FS21	09/02/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	178			
FS22	09/02/2022	2	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	46.4			

Ensolum 1 of 2



TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** PLU 21 Brushy Draw 104H, 123H, & 124H 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 C	Closure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
FS23	09/02/2022	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	35.2
FS24	09/02/2022	2	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	24.7
FS25	09/02/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	40.9
FS26	09/02/2022	2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	399
FS27	09/02/2022	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	528
FS28	09/02/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	497
SW01	09/02/2022	0-2	<0.00198	<0.00397	<49.9	<49.9	<49.9	<49.9	<49.9	390
SW02	09/02/2022	0-2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	533
SW03	09/02/2022	0-3	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	210
SW04	09/02/2022	0-2	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	119

Notes:

bgs: below ground surface

mg/kg: milligrams per kilogram

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or reclamation

standard where applicable.

Grey text indicate soil sample removed during excavation activities or re-sampled

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

TPH: Total Petroleum Hydrocarbon

Ensolum 2 of 2



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





APPENDIX B

Photographic Log

ENSOLUM

Photographic Log XTO Energy, Inc.

PLU 21 Brushy Draw 104H, 123H, & 124H Incident Numbers: NAPP2209736479, NAPP2211651017, NAPP2211151438





Photograph 1 Date: June 17, 2022 Description: Site Assessment Activities

Photograph 2 Date: August 31, 2022 Description: Delineation Activities





Photograph 3 Date: September 2, 2022 Description: Excavation Activities

Photograph 4 Date: September 2, 2022

Description: Excavation Activities



APPENDIX C

Lithologic Soil Sampling Logs

								Sample Name: PH01	Date: 8/31/2022	
ENSOLUM							M	Site Name: PLU 21 BD 104H, 123H, 124H		
Environmental, Engineering and							Incident Number: Multiple			
Hydrogeologic Consultants							Job Number: 03E1558048			
		LITHOL	OGI	C / SOIL S	SAMPLING	LOG		Logged By: KP	Method: Trackhoe	
Coord		2.109326						Hole Diameter: N/A	Total Depth: 2'	
Comm		ively. Chloride test								
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	·	
					1. 1	_ - -	CCHE (fill)	0-0.5', CALICHE w/ fine sand small sub-round gravel, b H/C odor, fill.	d, moist, tan, some brown stain, light	
М	2,552	1.0	Υ	SS01	0.5	- - -	SP	0.5'-2', SAND, moist, brown fine grain, trace silt, no si	, poorly graded, tain, no odor.	
М	6,076	0.2	N		1 _	1				
М	280	0.2	N	PH01	2	2	TD	Total Depth at 2 feet bgs.		

								Sample Name: PH02	Date: 8/31/2022		
		E	N	S	OL	_ U	M	Site Name: PLU 21 BD 104H, 123H			
					ngineeri			Incident Number: Multiple			
					onsultan			Job Number: 03E1558048			
		LITHOL	OGI	C / SOIL S	SAMPLING	LOG		Logged By: KP	Method: Trackhoe		
Coord	LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.109326103.88892							Hole Diameter: N/A	Total Depth: 2'		
Coordinates: 32.109326, -103.88892 Comments: Field screening conducted with HACH Chloride Test Strips and Piperformed with 1:4 dilution factor of soil to distilled water.								PID for chloride and vapor, respect	tively. Chloride test		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	·		
					1	_ - -	CCHE (fill)	0-0.5', CALICHE w/ fine sand small sub-round gravel, b H/C odor, fill.	d, moist, tan, some prown stain, light		
М	4,340	8.9	Υ	SS02	0.5	- - -	SP	0.5'-2', SAND, moist, brown fine grain, trace silt, no s	, poorly graded, tain, no odor.		
М	3,516	0.2	N		1 _	1					
М	<112	0.2	N	PH02	2	2	TD	Total Depth at 2 feet bgs.			

								Sample Name: PH03	Date: 8/31/2022		
		Е	N	S	OL	_ U	M	Site Name: PLU 21 BD 104H, 123H			
					ngineeri			Incident Number: Multiple			
					onsultan			Job Number: 03E1558048			
		LITHOL	OGI	C / SOIL S	SAMPLING	LOG		Logged By: KP	Method: Trackhoe		
Coord	LITHOLOGIC / SOIL SAMPLING LOG Coordinates: 32.109326, -103.88892							Hole Diameter: N/A	Total Depth: 2'		
Coordinates: 32.109326, -103.88892 Comments: Field screening conducted with HACH Chloride Test Strips and Properformed with 1:4 dilution factor of soil to distilled water.								PID for chloride and vapor, respec	tively. Chloride test		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De:	·		
					1	_ - -	CCHE (fill)	0-0.5', CALICHE w/ fine sand small sub-round gravel, b H/C odor, fill.	d, moist, tan, some prown stain, light		
M	1,892	3.8	Υ	SS03	0.5	· - -	SP	0.5'-2', SAND, moist, brown fine grain, trace silt, no s	, poorly graded, tain, no odor.		
М	4,429	0.2	N		1 _	1					
М	520	0.2	N	PH03	2 _	2	TD	Total Depth at 2 feet bgs.			

		Name of the last			<u> </u>			Sample Name: PH04	Date: 8/31/2022			
		E	N	5	OL	U	M	Site Name: PLU 21 BD 104H,				
					Engineer		_	Incident Number: Multiple				
					onsultar			Job Number: 03E1558048				
		LITHOL	OGIO	C / SOIL S	SAMPLING	LOG		Logged By: KP	Method: Trackhoe			
Coord	inates: 32	2.109326	, -103	.88892				Hole Diameter: N/A	Total Depth: 2'			
Coordinates: 32.109326, -103.88892 Comments: Field screening conducted with HACH Chloride Test Strips and P performed with 1:4 dilution factor of soil to distilled water.								PID for chloride and vapor, re	spectively. Chloride test			
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol		: Descriptions			
					1 -	L 0 -	CCHE (fill)	0-0.5', CALICHE w/ fine small sub-round grav H/C odor, fill.	sand, moist, tan, some el, brown stain, light			
М	3,712	3.5	Υ	SS04	0.5	- -	SP	0.5'-2', SAND, moist, bro fine grain, trace silt, I	own, poorly graded, no stain, no odor.			
М	2,111	0.2	N		1 _	1						
М	520	0.2	N	PH04	2	2	TD	Total Depth at 2 feet bg	ïS.			
					- - - - - - - - - - - - - - - - - - -							



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: 890-2427-1

Laboratory Sample Delivery Group: 03E1558053 Client Project/Site: PLU 21 BD 104H, 123H, 124H

Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMPR

Authorized for release by: 9/13/2022 11:50:01 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

 Client: Ensolum
 Laboratory Job ID: 890-2427-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

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Definitions/Glossary

Client: Ensolum Job ID: 890-2427-1 Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier

*+ LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

Qualifier Description

Indicates the analyte was analyzed for but not detected. U

GC Semi VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery **CFL** Contains Free Liquid **CFU** Colony Forming Unit **CNF** Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

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

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2427-1

SDG: 03E1558053

Job ID: 890-2427-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2427-1

REVISION

The report being provided is a revision of the original report sent on 6/24/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID change.

Report revision history

Receipt

The sample was received on 6/17/2022 4:33 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 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: 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) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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 sample was outside control limits: SS01 (890-2427-1). 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.

HPLC/IC

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

Eurofins Carlsbad 9/13/2022 (Rev. 1)

Client: Ensolum Job ID: 890-2427-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Client Samp

Date Collected Date Received: 06/17/22 16:33

Sample Depth: 0.5'

	· · · · · · · · · · · · · · · · · · ·
ple ID: SS01	Lab Sample ID: 890-2427-1
d: 06/17/22 12:35	Matrix: Solid

Sample Depth: 0.5								
Method: 8021B - Volatile O	rganic Compo	unds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
Toluene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
o-Xylene	< 0.00199	U *+	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/21/22 23:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			06/21/22 14:42	06/21/22 23:51	1
1,4-Difluorobenzene (Surr)	105		70 - 130			06/21/22 14:42	06/21/22 23:51	1
- Method: Total BTEX - Total	I BTEX Calcula	tion						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/22/22 12:17	1
- Method: 8015 NM - Diesel	Range Organic	s (DRO) (0	GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	7510		49.9	mg/Kg			06/22/22 11:20	1
- Method: 8015B NM - Diese	l Range Organ	ics (DRO)	(GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	125		49.9	mg/Kg		06/22/22 14:48	06/22/22 22:17	1
Diesel Range Organics (Over	7380		49.9	mg/Kg		06/22/22 14:48	06/22/22 22:17	1

o-Terphenyl	115		70 - 130		06/22/22 14:48	06/22/22 22:17	1
1-Chlorooctane	132	S1+	70 - 130		06/22/22 14:48	06/22/22 22:17	1
Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg	06/22/22 14:48	06/22/22 22:17	1
Diesel Range Organics (Over C10-C28)	7380		49.9	mg/Kg	06/22/22 14:48	06/22/22 22:17	1
Gasoline Range Organics (GRO)-C6-C10	125		49.9	mg/Kg	06/22/22 14:48	06/22/22 22:17	1

Method: 300.0 - Anions, ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	41500	250	mg/Kg			06/24/22 13:40	50

Eurofins Carlsbad

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2427-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		DED4	DFBZ1	Surrogate Recovery (Acceptance Limits)
		BFB1	DEDZI	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2426-A-1-C MS	Matrix Spike	110	99	
890-2426-A-1-D MSD	Matrix Spike Duplicate	91	93	
890-2427-1	SS01	117	105	
LCS 880-28063/1-A	Lab Control Sample	121	100	
LCSD 880-28063/2-A	Lab Control Sample Dup	110	104	
MB 880-27967/5-A	Method Blank	93	110	
MB 880-28063/5-A	Method Blank	95	107	
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)	
890-2427-1	SS01	132 S1+	115	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

DFBZ = 1,4-Difluorobenzene (Surr)

Eurofins Carlsbad

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Job ID: 890-2427-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27967/5-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27967

	MB MB						
Analyte	Result Qual	lifier RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200 U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	
Toluene	<0.00200 U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	
Ethylbenzene	<0.00200 U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	
m-Xylene & p-Xylene	<0.00400 U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	
o-Xylene	<0.00200 U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	
Xylenes, Total	<0.00400 U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	93	70 - 130	06/20/22 15:20	06/21/22 12:25
1,4-Difluorobenzene (Surr)	110	70 - 130	06/20/22 15:20	06/21/22 12:25

06/20/22 15:20 06/21/22 12:25 **Client Sample ID: Method Blank**

Prep Type: Total/NA

Prep Batch: 28063

Lab Sample ID: MB 880-28063/5-A

Matrix: Solid

Analysis Batch: 28005

	MB ME	3					
Analyte	Result Qu	ıalifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	0.00200	mg/Kg	_	06/21/22 14:42	06/21/22 23:09	1
Toluene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Ethylbenzene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
m-Xylene & p-Xylene	<0.00400 U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
o-Xylene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Xylenes, Total	<0.00400 U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	70 - 130	06/21/22 14:42	06/21/22 23:09	1
1,4-Difluorobenzene (Surr)	107	70 - 130	06/21/22 14:42	06/21/22 23:09	1

Lab Sample ID: LCS 880-28063/1-A

Matrix: Solid

Analysis Batch: 28005

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

Client Sample ID: Lab Control Sample Dup

Prep Batch: 28063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09845		mg/Kg		98	70 - 130	
Toluene	0.100	0.1157		mg/Kg		116	70 - 130	
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	
m-Xylene & p-Xylene	0.200	0.2330		mg/Kg		117	70 - 130	
o-Xylene	0.100	0.1311	*+	mg/Kg		131	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1.4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Analyte Benzene

Analysis Batch: 28005

						Prep Ty	pe: Tot	al/NA
						Prep E	atch: 2	28063
Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.1045		mg/Kg		105	70 - 130	6	35

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Dil Fac

QC Sample Results

Client: Ensolum Job ID: 890-2427-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Toluene 0.100 0.1127 mg/Kg 113 70 - 130 3 35 0.100 Ethylbenzene 0.1015 mg/Kg 102 70 - 130 10 35 0.200 0.2046 mg/Kg 102 70 - 130 35 m-Xylene & p-Xylene 13 0.100 35 o-Xylene 0.1150 mg/Kg 115 70 - 130 13

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2426-A-1-C MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 28005

Prep Type: Total/NA

Prep Batch: 28063

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier D %Rec Limits Unit Benzene <0.00199 U F1 0.100 0.07404 74 70 - 130 mg/Kg Toluene <0.00199 UF1 0.100 0.07758 mg/Kg 77 70 - 130 Ethylbenzene <0.00199 UF1 0.100 0.06116 F1 mg/Kg 61 70 - 130 m-Xylene & p-Xylene 0.200 0.1209 F1 60 70 - 130 <0.00398 U F1 mg/Kg o-Xylene <0.00199 U F1 *+ 0.100 0.06788 F1 mg/Kg 68 70 - 130

MS MS

Surrogate	%Recovery Qualitier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-2426-A-1-D MSD

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28063

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_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06494	F1	mg/Kg		65	70 - 130	13	35
Toluene	< 0.00199	U F1	0.100	0.06696	F1	mg/Kg		67	70 - 130	15	35
Ethylbenzene	<0.00199	U F1	0.100	0.04899	F1	mg/Kg		49	70 - 130	22	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.09419	F1	mg/Kg		47	70 - 130	25	35
o-Xylene	<0.00199	U F1 *+	0.100	0.05296	F1	mg/Kg		53	70 - 130	25	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27963/1-A

Matrix: Solid

Analysis Batch: 28185

Client Sample ID: Method Blank

Prep Type: Soluble

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/24/22 11:13	1

QC Sample Results

Client: Ensolum Job ID: 890-2427-1 Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558053

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-27963/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 28185

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit Limits D %Rec Chloride 250 272.5 mg/Kg 109 90 - 110

Lab Sample ID: LCSD 880-27963/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 28185

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 250 90 - 110 Chloride 274.8 mg/Kg 110

Lab Sample ID: 890-2428-A-1-G MS **Client Sample ID: Matrix Spike Matrix: Solid Prep Type: Soluble**

Analysis Batch: 28185

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Limits **Analyte** Unit %Rec Chloride 31300 12600 44610 mg/Kg

Lab Sample ID: 890-2428-A-1-H MSD

Matrix: Solid

Analysis Batch: 28185

Spike MSD MSD %Rec **RPD** Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 31300 12600 44560 mg/Kg 105 90 - 110 20

QC Association Summary

Client: Ensolum Job ID: 890-2427-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

GC VOA

Prep Batch: 27967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-27967/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 28005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	8021B	28063
MB 880-27967/5-A	Method Blank	Total/NA	Solid	8021B	27967
MB 880-28063/5-A	Method Blank	Total/NA	Solid	8021B	28063
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	8021B	28063
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28063
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	28063
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28063

Prep Batch: 28063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	5035	
MB 880-28063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28144

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 28088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	8015B NM	28163

Analysis Batch: 28132

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	8015 NM	

Prep Batch: 28163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 27963

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Lab Sample ID 890-2427-1	Client Sample ID SS01	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2427-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

HPLC/IC

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2427-1	SS01	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	27963
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27963

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-2427-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

Client Sample ID: SS01 Lab Sample ID: 890-2427-1

Date Collected: 06/17/22 12:35
Date Received: 06/17/22 16:33
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			5.03 g	5 mL	28063	06/21/22 14:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/21/22 23:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			28144	06/22/22 12:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			28132	06/22/22 11:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28163	06/22/22 14:48	DM	EET MID
Total/NA	Analysis	8015B NM		1			28088	06/22/22 22:17	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	27963	06/21/22 12:47	SMC	EET MID
Soluble	Analysis	300.0		50			28185	06/24/22 13:40	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
 Job ID: 890-2427-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority	Pı	rogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-22-24	06-30-22
The following analyte	o are included in this ren	art but the laboratory is a		TI 1. P. 4
the agency does not	•	ort, but the laboratory is i	not certified by the governing authority.	i nis iist may include analyte
,	•	Matrix	Analyte	i nis list may include analyte
the agency does not	offer certification.	•	, , ,	This list may include analyte

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2427-1

SDG: 03E1558053

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 21 BD 104H, 123H, 124H

Job ID: 890-2427-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2427-1	SS01	Solid	06/17/22 12:35	06/17/22 16:33	0.5'

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eurofins Environment Testing

City, State ZIP:

3122 National parks Hwy Carlsbad, NM 88220

City, State ZIP:

Garrett Green

XTO Energy, Inc.

3104 E. Green Street
Carlsbad, NM 88220

Address:

Bill to: (if different)
Company Name:

Project Manager: Company Name:

Ben Belill Ensolum, LLC

Chain of Custody

Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440. San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (808) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199

Work Orger No:
www.xenco.com Page1_of1_
Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level III DLevel III DPST/UST TRRP Level IV
Deliverables: EDD

Total 200.7 6610 200.8 / 800 Matrix Sampled Depth Competition Sample Gabory Sales (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X Sample Gabories (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X X Sample Gabories (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X X X Sample Gabories (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X X X X Sample Gabories (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X X X X Sample Gabories (Fig. No. 1772022 N.C. 25 Grab) 1 X X X X X X X X X X X X X X X X X X	219					
ndy Mn Mo Ni K Se Ag SiO ₂ Na I Se Ag Ti U Hg: 1631 / 2 assigns standard terms and conditions to circumstances beyond the control if be enforced unless previously negotiated. Received by: (Signature	7/10	-			C	0
Nody		*	a X P		My Parker	The Mary Contract
Ddy N N N N N N N N N N N N N	Da		Received by: (Signature)	Received	(Signature)	Relinquished by: (Signature)
ody Nody N	or any los	order from clie esponsibility for 5 for each san	utes a valid purchase thail not assume any respect and a charge of \$	of samples constit st of samples and s applied to each pro	ocument and relinquishment owill be liable only for the comum charge of \$85,00 will be	ce: Signature of this d rvice, Eurofins Xence rrofins Xenco. A mini
ody Nn Mo Ni K Se Ag SiO ₂ Na	A Sb	010: 8RCF	TCLP / SPLP 6	zed	Circle Method(s) and Metal(s) to be analyzed	cle Method(s) an
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody	Al Sb	exas 11 /	8RCRA 13PPM Texas 11		10 200.8 / 6020:	Total 200.7 / 6010
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody	-					
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody	+					
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody	+					
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody	-					
X TPH (8015) X BTEX (8021 890-2427 Chain of Custody						
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× TPH (8015) × BTEX (8021 890-2427 Chain of Custody	-					
× TPH (8015) × BTEX (8021 890-2427 Chain of Custody						
BTEX (8021 890-2427 Chain of Custody	<u>~</u>	Grab/	12:35 0.5'	6/17/2022 \	S	SS04
8021 890-2427 Chain of Custody	C # of CHLO	Grab/ Comp	Time Depth	Date Sampled	tification Matrix	Sample Identification
890-2427 Chain of Custody	RIDE	Ċ	perature: 14	Corrected Temperature:		Total Containers:
	S (F	0		Temperature Reading:	is: Yes No NIA	Sample Custody Seals:
		رو	tor:	Correction Factor:	Yes No MA	Cooler Custody Seals:
		100	D: T/3	Thermometer ID:	tact: Yes) No	Samples Received Intact:
	nete	8	Wet Ice: Yes	Yes (Sa)	PT Temp Blank:	SAMPLE RECEIPT
	ers	Ц	the lab, if received by 4:30pm		C	PO #:
		eived by	TAT starts the day received by		general barlese	Sampler's Name:
Cool: Cool MeOH: Me	_	L,	Due Date:		EDDY COUNTY, NM	Project Location:
None: NO DI Water: H ₂ O	Pres. Code		☑ Routine ☐ Rush		03E1558053	Project Number:
ANALYSIS REQUEST Preservative Codes		۵	Turn Around	3H, & 124H	PLU 21 BD 104H, 123H, & 124H	Project Name:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2427-1 SDG Number: 03E1558053

Login Number: 2427 **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	

Login Sample Receipt Checklist

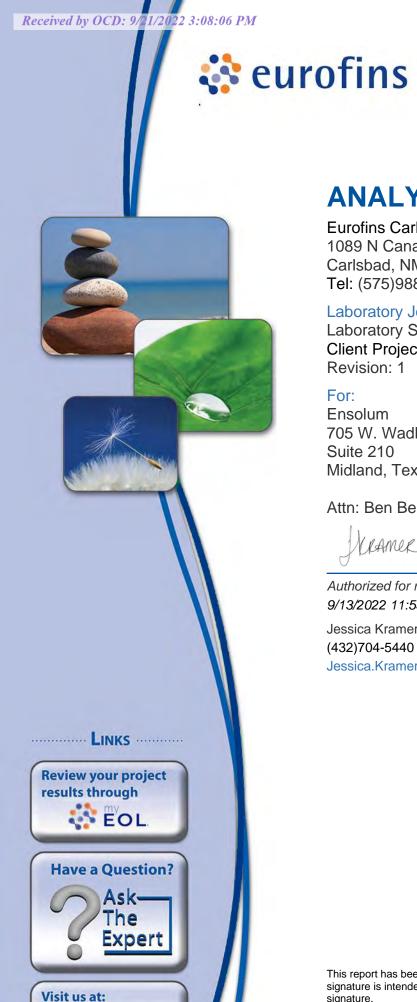
Client: Ensolum Job Number: 890-2427-1 SDG Number: 03E1558053

Login Number: 2427 **List Source: Eurofins Midland** List Creation: 06/21/22 11:48 AM List Number: 2

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").



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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2428-1

Laboratory Sample Delivery Group: 03E1558053 Client Project/Site: PLU 21 BD 104H,123H, 124H

Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMPR

Authorized for release by: 9/13/2022 11:55:27 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

 Client: Ensolum
 Laboratory Job ID: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

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Definitions/Glossary

Client: Ensolum Job ID: 890-2428-1 Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier

Qualifier Description LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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**

Detection Limit (DoD/DOE) DL

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) Limit of Quantitation (DoD/DOE) LOQ

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

MDL Method Detection Limit MLMinimum 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)

Negative / Absent NEG POS Positive / Present

PQL **Practical Quantitation Limit**

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H, 124H

Job ID: 890-2428-1

SDG: 03E1558053

Job ID: 890-2428-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2428-1

REVISION

The report being provided is a revision of the original report sent on 6/24/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID change.

Report revision history

Receipt

The sample was received on 6/17/2022 4:33 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 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: 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) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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: 890-2428-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Client Sample ID: SS03 Lab Sample ID: 890-2428-1

Date Collected: 06/17/22 12:47 Matrix: Solid Date Received: 06/17/22 16:33

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
o-Xylene	<0.00200	U *+	0.00200	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		06/21/22 14:42	06/22/22 00:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			06/21/22 14:42	06/22/22 00:12	1
1,4-Difluorobenzene (Surr)	96		70 - 130			06/21/22 14:42	06/22/22 00:12	1
Method: Total BTEX - Total	BTEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			06/22/22 12:17	1
Analyte Fotal TPH Method: 8015B NM - Diesel	11800	Qualifier	250 (GC)	mg/Kg		Prepared	Analyzed 06/22/22 11:20	Dil Fac
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	279		250	mg/Kg	_ =	06/21/22 11:35	06/22/22 05:32	5
Diesel Range Organics (Over C10-C28)	7120		250	mg/Kg		06/21/22 11:35	06/22/22 05:32	5
Oll Range Organics (Over C28-C36)	4390		250	mg/Kg		06/21/22 11:35	06/22/22 05:32	5
_	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
			70 - 130			06/21/22 11:35	06/22/22 05:32	5
1-Chlorooctane	112		70 - 130				00: ==: == 00:0=	_
1-Chlorooctane	112 106		70 - 130 70 - 130			06/21/22 11:35	06/22/22 05:32	-
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion	106	ıphy - Solu	70 - 130			06/21/22 11:35		5
1-Chlorooctane o-Terphenyl	106 Chromatogra	iphy - Solu Qualifier	70 - 130	Unit mg/Kg	<u>D</u>	06/21/22 11:35 Prepared		_

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		Percent	Surrogate Recovery (Acceptance Limits)
	BFB1	DFBZ1	
Client Sample ID	(70-130)	(70-130)	
Matrix Spike	110	99	
Matrix Spike Duplicate	91	93	
SS03	86	96	
Lab Control Sample	121	100	
Lab Control Sample Dup	110	104	
Method Blank	93	110	
Method Blank	95	107	
	Matrix Spike Matrix Spike Duplicate SS03 Lab Control Sample Lab Control Sample Dup Method Blank	Client Sample ID (70-130) Matrix Spike 110 Matrix Spike Duplicate 91 SS03 86 Lab Control Sample 121 Lab Control Sample Dup 110 Method Blank 93	Client Sample ID (70-130) (70-130) Matrix Spike 110 99 Matrix Spike Duplicate 91 93 SS03 86 96 Lab Control Sample 121 100 Lab Control Sample Dup 110 104 Method Blank 93 110

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

Matrix: Solid Prep Type: Total/NA

		rcent Surrogate Recovery (Acceptance Limits)		
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2428-1	SS03	112	106	

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Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

DFBZ = 1,4-Difluorobenzene (Surr)

Job ID: 890-2428-1 Client: Ensolum Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27967/5-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27967

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	93		70 - 130	
1,4-Difluorobenzene (Surr)	110		70 - 130	

06/20/22 15:20 06/21/22 12:25

Analyzed

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

06/20/22 15:20 06/21/22 12:25

Prepared

Prep Batch: 28063

Lab Sample ID: MB 880-28063/5-A

Matrix: Solid

Analysis Batch: 28005

	MB ME	3					
Analyte	Result Qu	ıalifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	0.00200	mg/Kg	_	06/21/22 14:42	06/21/22 23:09	1
Toluene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Ethylbenzene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
m-Xylene & p-Xylene	<0.00400 U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
o-Xylene	<0.00200 U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Xylenes, Total	<0.00400 U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	70 - 130	06/21/22 14:42	06/21/22 23:09	1
1,4-Difluorobenzene (Surr)	107	70 - 130	06/21/22 14:42	06/21/22 23:09	1

Lab Sample ID: LCS 880-28063/1-A

Matrix: Solid

Analysis Batch: 28005

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

Client Sample ID: Lab Control Sample Dup

Prep Batch: 28063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09845		mg/Kg		98	70 - 130	
Toluene	0.100	0.1157		mg/Kg		116	70 - 130	
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	
m-Xylene & p-Xylene	0.200	0.2330		mg/Kg		117	70 - 130	
o-Xylene	0.100	0.1311	*+	mg/Kg		131	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Benzene

Analysis Batch: 28005	
Analyte	

						Prep ly Prep E	pe: 10t Batch: 2	
Spike	LCSD	LCSD				%Rec		RPD
Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
0.100	0.1045		mg/Kg		105	70 - 130	6	35

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Dil Fac

QC Sample Results

Client: Ensolum Job ID: 890-2428-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

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

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

LCSD LCSD Spike %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Toluene 0.100 0.1127 mg/Kg 113 70 - 130 3 35 Ethylbenzene 0.100 0.1015 mg/Kg 102 70 - 130 10 35 0.200 0.2046 mg/Kg 70 - 130 35 m-Xylene & p-Xylene 102 13 0.100 35 o-Xylene 0.1150 mg/Kg 115 70 - 130 13

LCSD LCSD

Surrogate	%Recovery Qual	ifier Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: 890-2426-A-1-C MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 28005

Prep Type: Total/NA

Prep Batch: 28063

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1	0.100	0.07404		mg/Kg		74	70 - 130	
Toluene	<0.00199	U F1	0.100	0.07758		mg/Kg		77	70 - 130	
Ethylbenzene	<0.00199	U F1	0.100	0.06116	F1	mg/Kg		61	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1	0.200	0.1209	F1	mg/Kg		60	70 - 130	
o-Xylene	<0.00199	U F1 *+	0.100	0.06788	F1	mg/Kg		68	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-2426-A-1-D MSD

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28063

Allalysis Batoli. 20000									I ICP L	dicon. 2	-0000
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06494	F1	mg/Kg		65	70 - 130	13	35
Toluene	< 0.00199	U F1	0.100	0.06696	F1	mg/Kg		67	70 - 130	15	35
Ethylbenzene	< 0.00199	U F1	0.100	0.04899	F1	mg/Kg		49	70 - 130	22	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.09419	F1	mg/Kg		47	70 - 130	25	35
o-Xylene	<0.00199	U F1 *+	0.100	0.05296	F1	mg/Kg		53	70 - 130	25	35

MSD MSD

Surrogate	%Recovery Quali	ner Limits
4-Bromofluorobenzene (Surr)	91	70 - 130
1,4-Difluorobenzene (Surr)	93	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27963/1-A

Matrix: Solid

Analysis Batch: 28185

Client Sample ID: Method Blank

Prep Type: Soluble

MB MB

Result Qualifier RL Unit Analyte Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 06/24/22 11:13

QC Sample Results

 Client: Ensolum
 Job ID: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-27963/2-A Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit Limits D %Rec Chloride 250 272.5 mg/Kg 109 90 - 110

Lab Sample ID: LCSD 880-27963/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 28185

Analysis Batch: 28185

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 250 90 - 110 Chloride 274.8 mg/Kg 110

Lab Sample ID: 890-2428-1 MS

Matrix: Solid

Client Sample ID: SS03

Prep Type: Soluble

Analysis Batch: 28185

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

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits

Chloride 31300 12600 44610 mg/Kg 105 90 - 110

Lab Sample ID: 890-2428-1 MSD Matrix: Solid

Analysis Batch: 28185

Spike MSD MSD %Rec **RPD** Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 31300 12600 44560 105 mg/Kg 90 - 110

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Client Sample ID: SS03

Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H, 124H

Job ID: 890-2428-1 SDG: 03E1558053

GC VOA

Prep Batch: 27967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-27967/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 28005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	8021B	28063
MB 880-27967/5-A	Method Blank	Total/NA	Solid	8021B	27967
MB 880-28063/5-A	Method Blank	Total/NA	Solid	8021B	28063
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	8021B	28063
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28063
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	28063
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28063

Prep Batch: 28063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	5035	_
MB 880-28063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 27963

Lab Sample ID 890-2428-1	Client Sample ID	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2428-1 MS	SS03	Soluble	Solid	DI Leach	
890-2428-1 MSD	SS03	Soluble	Solid	DI Leach	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

HPLC/IC

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2428-1	SS03	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
890-2428-1 MS	SS03	Soluble	Solid	300.0	27963
890-2428-1 MSD	SS03	Soluble	Solid	300.0	27963

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

Client Sample ID: SS03

Lab Sample ID: 890-2428-1

Date Collected: 06/17/22 12:47

Date Received: 06/17/22 16:33

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			5.01 g	5 mL	28063	06/21/22 14:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/22/22 00:12	MR	EET MID
Total/NA	Analysis	Total BTEX		1			28145	06/22/22 12:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			28133	06/22/22 11:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	28045	06/21/22 11:35	DM	EET MID
Total/NA	Analysis	8015B NM		5			27998	06/22/22 05:32	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	27963	06/21/22 12:47	SMC	EET MID
Soluble	Analysis	300.0		50			28185	06/24/22 13:49	SMC	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: 890-2428-1

 Project/Site: PLU 21 BD 104H,123H, 124H
 SDG: 03E1558053

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	NI	ELAP	T104704400-22-24	06-30-22
The following analyte	o are included in this ren	art but the laboratory is r	and portified by the governing outhority	This list may include analytes for
,	•	ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for
the agency does not	offer certification.	•	, , ,	This list may include analytes for t
,	•	Matrix	Analyte	This list may include analytes for v
the agency does not	offer certification.	•	, , ,	This list may include analytes for v

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H, 124H

Job ID: 890-2428-1

SDG: 03E1558053

Laboratory	
EET MID	
EET MID	
EET MID	

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 21 BD 104H,123H, 124H

Job ID: 890-2428-1 SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2428-1	SS03	Solid	06/17/22 12:47	06/17/22 16:33	0.5'

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eurofins

Environment Testing

Xenco

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) 382-7550, Carlsbad, NM (575) 98 Houston, TX (281) 240-4200. Dallas, TX (214) 902-0300

Work Order No:

Project Manager:

ompany Name:

Ensolum, LLC Ben Belill

Address: City, State ZIP:

Carlsbad, NM 88220

3104 E. Green Street XTO Energy, Inc.

Company Name: Bill to: (if different)

Garrett Green

ity, State ZIP

9898540852 Carlsbad, NM 88220 3122 National parks Hwy

oject Name:

PLU 21 BD 104H, 123H, & 124H

	ANALY							88-3199
	'SIS F							
	ANALYSIS REQUEST	Deliverables: EDD ADaPT	Reporting: Level II DLevel III DPST/UST TRRP Level IV	State of Project:	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	Work Order Comments	www.xenco.com	
None: NO DI Water: H ₂ O	Preservative Codes	[□ Other:	I/UST TRRP Level IV	1	nfields 🗌 RRC 📗 Superfund 📗	comments	Page1_ of1_	
		l L					J	

Sampler's Name: Project Location: Project Number:

EDDY COUNTY, NM 03E1558053

Due Date:

Cool: Cool

MeOH: Me

✓ Routine

Rush

Turn Around

Palese

Paysed Date: 08/25/2020 Rev 2020.2						0											
						1685		हिर्माभ	19	(tit	ala C	8	No.	Perdebus	L	Report R.
Date/Time	Received by: (Signature)	Z	nature)	by: (Sig	Relinquished by: (Signature)	Rel	1 "	Date/Time			ure)	Received by: (Signature)	Received		nature)	by: (Sigr	Relinquished by: (Signature)
	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.	ns standard i circumstance mforced unle	ors. It assigns are due to	ubcontract f such loss d. These te	illates and s y the client I not analyze	incurred b Xenco, bu	expenses Eurofins	pany to E osses or bmitted t	lient con y for any ample su	der from c ponsibility for each s	arge of \$5 i	utes a valid p shall not assu oject and a ch	samples constit of samples and : plied to each pr	shment of the cost of will be ap	nt and relinquise liable only for harge of \$85.00	his docume: (enco will bo minimum ci	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 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 it such losses are 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 we describe the contract of t
7470 / 7471	J Hg: 1631 / 245.1 / 7470 / 7471	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Ni Se	b Mn N	Co Cu F	Cd Cr	ва Ве	b As			PLP 601	TCLP / SPLP 6010: 8RCRA		analyze	tal(s) to be	and Me	Circle Method(s) and Metal(s) to be analyzed
Sn U V Zn	Mg Mn Mo Ni K Se Ag SiO₂Na Sr Tl Sn U V Zn	In Mo Ni	Pb Mg N	Cu Fe	B Cd Ca Cr Co Cu Fe	CO CO	Be E	Al Sb As Ba Be	A St		PM Te	8RCRA 13PPM Texas 11	8R	20:	200.8 / 6020	- 1	Total 200.7 / 6010
			-		-		-	-									
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NAPP2211151438	z																
NAPP2211651017,	z							_									
NAPP2209/364/9, NAPP2210942764	2 2																
Incident Numbers:	=																
1666401001, 166601001	1666						Н	-									
Cost Centers: 1666351001,	Cost						×	×	>	Grab/	0.5	してい	6/17/2022		S	SS06	S
Sample Comments	Sa						BTEX (CHLOF	# of Cont	Grab/ Comp	Depth	Time Sampled	Date Sampled	Matrix		dentificati	Sample Identification
NaOH+Ascorbic Acid. VAFC	NaCH+	-	-	-						Ċ	17	perature:	Corrected Temperature:	0			Total Containers:
Zn Acetate+NaOH: Zn	Zn Aceta		ustody	hain of C	890-2428 Chain of Custody	89				رو	7	eading:	N/A Temperature Reading	N/A) T	Yes No	Seals:	Sample Custody Seals:
Na ₂ S ₂ O ₃ : NaSO ₃	Na ₂ S ₂ O ₃						-	PA:	Pa	V	0-0	tor:	Correction Factor:	C	Yes No	eals:	Cooler Custody Seals:
NaHSO ₄ : NABIS	NaHSO							300	arar	B	1230C	D	Thermometer ID:		(Yes) No	d Intact:	Samples Received Intact:
Ŧ	H₃PO₄: HP							.0)	nete	N _O	RE)	Wet Ice:	Yes (NO)		Temp Blank:	EIPT	SAMPLE RECEIPT
H ₂ NaOH: Na	H ₂ S0 ₄ : H ₂								rs	:30pm	eived by 4	the lab, if received by 4:30pm					PO #
	וווכר ווכ	_	-	:	_			_		ived by	day recei	TAT starts the day received by		rales c	Grea You	<u>ু</u>	Sampler's Name:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2428-1 SDG Number: 03E1558053

Login Number: 2428 **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	
s 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: 890-2428-1 SDG Number: 03E1558053

Login Number: 2428 **List Source: Eurofins Midland** List Creation: 06/21/22 10:52 AM List Number: 2

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").

Released to Imaging: 12/13/2022 2:43:30 PM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2429-1

Laboratory Sample Delivery Group: 03E1558053 Client Project/Site: PLU 21 BD 104H, 123H, & 124H

Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMPR

Authorized for release by: 9/13/2022 11:59:32 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H, 123H, & 124H

Laboratory Job ID: 890-2429-1 SDG: 03E1558053

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Definitions/Glossary

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier **Qualifier Description**

LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

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

Duplicate Error Ratio (normalized absolute difference) **DER**

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML 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

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RI 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 21 BD 104H, 123H, & 124H

Job ID: 890-2429-1

SDG: 03E1558053

Job ID: 890-2429-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2429-1

REVISION

The report being provided is a revision of the original report sent on 6/24/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID change.

Report revision history

Receipt

The sample was received on 6/17/2022 4:33 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 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: 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) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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

GC Semi VOA

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

HPLC/IC

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

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Eurofins Carlsbad 9/13/2022 (Rev. 1)

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

Client Sample ID: SS04 Lab Sample ID: 890-2429-1

Date Collected: 06/17/22 12:55 Matrix: Solid Date Received: 06/17/22 16:33

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:33	
Toluene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:33	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:33	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 00:33	
o-Xylene	< 0.00199	U *+	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:33	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 00:33	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
4-Bromofluorobenzene (Surr)	96	-	70 - 130			06/21/22 14:42	06/22/22 00:33	
1,4-Difluorobenzene (Surr)	101		70 - 130			06/21/22 14:42	06/22/22 00:33	
Method: Total BTEX - Total I	BTEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/22/22 12:17	
Total TPH	292	ing (DDO)	50.0	mg/Kg			06/22/22 11:20	
Method: 8015B NM - Diesel	_		• •	1194	_	D	A	D:: F
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Gasoline Range Organics GRO)-C6-C10	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/22/22 03:48	
Diesel Range Organics (Over C10-C28)	115		50.0	mg/Kg		06/21/22 11:35	06/22/22 03:48	
Oll Range Organics (Over C28-C36)	177		50.0	mg/Kg		06/21/22 11:35	06/22/22 03:48	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
1-Chlorooctane	91		70 - 130			06/21/22 11:35	06/22/22 03:48	
p-Terphenyl	99		70 - 130			06/21/22 11:35	06/22/22 03:48	
Method: 300.0 - Anions, Ion	Chromatogra	phy - Solu	ble					
method: 500.0 - Amons, for								
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed 06/24/22 14:17	Dil F

Surrogate Summary

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

			Percent S	urrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2426-A-1-C MS	Matrix Spike	110	99	
890-2426-A-1-D MSD	Matrix Spike Duplicate	91	93	
890-2429-1	SS04	96	101	
LCS 880-28063/1-A	Lab Control Sample	121	100	
LCSD 880-28063/2-A	Lab Control Sample Dup	110	104	
MB 880-27967/5-A	Method Blank	93	110	
MB 880-28063/5-A	Method Blank	95	107	

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

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

Matrix: Solid Prep Type: Total/NA

			Percen	t Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-16078-A-21-B MS	Matrix Spike	82	79	
880-16078-A-21-C MSD	Matrix Spike Duplicate	86	82	
890-2429-1	SS04	91	99	
LCS 880-28045/2-A	Lab Control Sample	104	110	
LCSD 880-28045/3-A	Lab Control Sample Dup	104	113	
MB 880-28045/1-A	Method Blank	102	119	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27967/5-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 28005

Analysis Batch: 28005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27967

	MB M	/IB						
Analyte	Result Q	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	J	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Toluene	<0.00200 U	J	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	•
Ethylbenzene	<0.00200 U	J	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	•
m-Xylene & p-Xylene	<0.00400 U	j	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	
o-Xylene	<0.00200 U	J	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Xylenes, Total	<0.00400 U	J	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	•

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93	70 - 130	06/20/22 15:20	06/21/22 12:25	1
1,4-Difluorobenzene (Surr)	110	70 - 130	06/20/22 15:20	06/21/22 12:25	1

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

Prep Batch: 28063

MR MR

Lab Sample ID: MB 880-28063/5-A

	IVID	IAID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95	70 - 130	06/21/22 14:42	06/21/22 23:09	1
1,4-Difluorobenzene (Surr)	107	70 - 130	06/21/22 14:42	06/21/22 23:09	1

Lab Sample ID: LCS 880-28063/1-A

Matrix: Solid

Analysis Batch: 28005

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

Client Sample ID: Lab Control Sample Dup

Prep Batch: 28063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09845		mg/Kg		98	70 - 130	
Toluene	0.100	0.1157		mg/Kg		116	70 - 130	
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	
m-Xylene & p-Xylene	0.200	0.2330		mg/Kg		117	70 - 130	
o-Xylene	0.100	0.1311	*+	mg/Kg		131	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 28005							Prep E	Batch: 2	28063
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	 0.100	0.1045		mg/Kg		105	70 - 130	6	35

Eurofins Carlsbad

QC Sample Results

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

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

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

LCSD LCSD **RPD** Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Toluene 0.100 0.1127 mg/Kg 113 70 - 130 3 35 Ethylbenzene 0.100 0.1015 mg/Kg 102 70 - 130 10 35 0.200 0.2046 102 70 - 130 35 m-Xylene & p-Xylene mg/Kg 13 0.100 35 o-Xylene 0.1150 mg/Kg 115 70 - 130 13

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2426-A-1-C MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 28005

Prep Type: Total/NA

Prep Batch: 28063

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier D %Rec Limits Unit Benzene <0.00199 U F1 0.100 0.07404 74 70 - 130 mg/Kg Toluene <0.00199 UF1 0.100 0.07758 mg/Kg 77 70 - 130 Ethylbenzene <0.00199 UF1 0.100 0.06116 F1 mq/Kq 61 70 - 130 0.200 0.1209 F1 60 70 - 130 m-Xylene & p-Xylene <0.00398 U F1 mg/Kg o-Xylene <0.00199 U F1 *+ 0.100 0.06788 F1 mg/Kg 68 70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-2426-A-1-D MSD

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28063

Spike MSD MSD %Rec **RPD** Sample Sample Result Qualifier Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit Benzene <0.00199 UF1 0.100 0.06494 F1 mg/Kg 65 70 - 130 13 35 Toluene <0.00199 UF1 0.100 0.06696 F1 mg/Kg 67 70 - 130 15 35 mg/Kg Ethylbenzene <0.00199 UF1 0.100 0.04899 F1 49 70 - 130 22 35 0.201 0.09419 F1 47 25 35 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 70 - 13070 - 130 o-Xylene <0.00199 U F1 *+ 0.100 0.05296 F1 53 25 35 mq/Kq

MSD MSD

Surrogate	%Recovery	Quaimer	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

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

Lab Sample ID: MB 880-28045/1-A

Matrix: Solid

Analysis Batch: 27998

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

Prep Batch: 28045

MB MB Result Qualifier RL Unit Analyte Prepared Analyzed Gasoline Range Organics <50.0 U 50.0 mg/Kg 06/21/22 11:35 06/21/22 21:37

(GRO)-C6-C10

Client: Ensolum

Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

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

Lab Sample ID: MB 880-28045/1-A **Matrix: Solid**

Analysis Batch: 27998

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 28045

ı		IVID	MID						
l	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
	Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130	06/21/22 11:35	06/21/22 21:37	1
o-Terphenyl	119		70 - 130	06/21/22 11:35	06/21/22 21:37	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-28045/2-A **Matrix: Solid Prep Type: Total/NA** Prep Batch: 28045

Analysis Batch: 27998

7 maryolo Batolii 27 000							op =	uto =	
	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	992.5		mg/Kg		99	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1042		mg/Kg		104	70 - 130		
C10-C28)									

LCS LCS

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	104	70 - 130
o-Terphenyl	110	70 - 130

Lab Sample ID: LCSD 880-28045/3-A **Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA**

Matrix: Solid

Analysis Batch: 2/998						Prep Batch: 28045				
	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130	4	20	
Diesel Range Organics (Over	1000	1061		mg/Kg		106	70 - 130	2	20	

C10-C28)

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	113		70 - 130

La

Analysis Batch: 27998

_ab Sample ID: 880-16078-A-21-B MS	Client Sample ID: Matrix Spike
Matrix: Solid	Prep Type: Total/NA
North at a Dartala arrange	Data Data La constitución

Prep Batch: 28045

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	905.3		mg/Kg		87	70 - 130	
Diesel Range Organics (Over	<49.9	U	998	799.1		mg/Kg		80	70 - 130	

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	82		70 - 130
o-Terphenyl	79		70 - 130

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

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

Lab Sample ID: 880-16078-A-21-C MSD

Matrix: Solid

Analysis Batch: 27998

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28045

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	999	933.1		mg/Kg		89	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	845.4		mg/Kg		85	70 - 130	6	20

C10-C28)

MSD MSD

Surrogate	%Recovery Qualified	r Limits
1-Chlorooctane	86	70 - 130
o-Terphenyl	82	70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27963/1-A **Client Sample ID: Method Blank Matrix: Solid Prep Type: Soluble**

Analysis Batch: 28185

MB MB

Analyte	Result C	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	J	5.00	mg/Kg			06/24/22 11:13	1

Lab Sample ID: LCS 880-27963/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 250	272.5		mg/Kg		109	90 - 110	

Lab Sample ID: LCSD 880-27963/3-A **Client Sample ID: Lab Control Sample Dup Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	274.8		ma/Ka		110	90 - 110		20

Lab Sample ID: 890-2428-A-1-G MS **Client Sample ID: Matrix Spike Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	31300		12600	44610		ma/Ka	_	105	90 - 110	

Lab Sample ID: 890-2428-A-1-H MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

Analysis Baton. 20100											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	31300		12600	44560		ma/Ka		105	90 - 110		20

QC Association Summary

Client: Ensolum Job ID: 890-2429-1 Project/Site: PLU 21 BD 104H, 123H, & 124H SDG: 03E1558053

GC VOA

Prep Batch: 27967

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-27967/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 28005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2429-1	SS04	Total/NA	Solid	8021B	28063
MB 880-27967/5-A	Method Blank	Total/NA	Solid	8021B	27967
MB 880-28063/5-A	Method Blank	Total/NA	Solid	8021B	28063
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	8021B	28063
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28063
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	28063
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28063

Prep Batch: 28063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2429-1	SS04	Total/NA	Solid	5035	
MB 880-28063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2429-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID 890-2429-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 28045
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015B NM	28045
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28045
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28045
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28045
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID 890-2429-1	Client Sample ID SS04	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28128

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2429-1	SS04	Total/NA	Solid	8015 NM	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2429-1

 Project/Site: PLU 21 BD 104H, 123H, & 124H
 SDG: 03E1558053

HPLC/IC

Leach Batch: 27963

Lab Sample ID 890-2429-1	Client Sample ID SS04	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2429-1	SS04	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	27963
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27963

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-2429-1

 Project/Site: PLU 21 BD 104H, 123H, & 124H
 SDG: 03E1558053

Client Sample ID: SS04

Lab Sample ID: 890-2429-1

Date Collected: 06/17/22 12:55

Date Received: 06/17/22 16:33

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			5.02 g	5 mL	28063	06/21/22 14:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/22/22 00:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			28146	06/22/22 12:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			28128	06/22/22 11:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	28045	06/21/22 11:35	DM	EET MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 03:48	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	27963	06/21/22 12:47	SMC	EET MID
Soluble	Analysis	300.0		20			28185	06/24/22 14:17	SMC	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: 890-2429-1

 Project/Site: PLU 21 BD 104H, 123H, & 124H
 SDG: 03E1558053

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	06-30-22
The following analyte the agency does not	•	ort, but the laboratory is r	not certified by the governing authority.	This list may include analytes for which
Analysis Method	Prep Method	Matrix	Analyte	
/ widiyolo Miculou			,	
8015 NM	<u>'</u>	Solid	Total TPH	

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, & 124H

Job ID: 890-2429-1

SDG: 03E1558053

Laboratory	
EET MID	
EET MID	

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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, & 124H

Job ID: 890-2429-1

SDG: 03E1558053

Lab Sample ID Client Sample ID Collected Matrix Received Depth 890-2429-1 SS04 Solid 06/17/22 12:55 06/17/22 16:33 0.5'

eurofins

Xenco

Environment Testing

Chain of Custody

Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	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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Work Order No:

	None: NO DI Water: H ₂ O		Code	utine 🗌 Rush	utine
	ANALYSIS REQUEST Preservative Codes			Turn Around	Tur
	Deliverables: EDD ADaPT Cher:	m	olum.co	Email: bbelill@ensolum.com	Email
	_	Carlsbad, NM 88220	<u>.</u>	City, State ZIP:	
	State of Project:	3104 E. Green Street		Address:	
	Program: UST/PST PRP Brownfields RRC Superfund	XTO Energy, Inc.		Company Name:	
	Work Order Comments	Bill to: (if different) Garrett Green	rent)	Bill to: (if differ	
	www.xenco.com Page 1 of 1	Flubbs, Min (5/3) 302-7/330, Callabad, Min (5/3) 300-7/300	ODDS, WIN	į	
9/	5) (94-1296	EL Paso, TX (945) 585-3443, Lubbock, TX (806) 794-1296	Paso, TX	. [

Project Location: Sampler's Name: Project Number: Project Name:

05.59

Yalese

EDDY COUNTY, NM 03E1558053

Due Date: ✓ Routine

TAT starts the day received by the lab, if received by 4:30pm

Cool: Cool HCL: HC H₂SO₄: H₂

MeOH: Me HNO₃: HN NaOH: Na

Company Name:

ddress:

Project Manager:

Ben Belill Ensolum, LLC

City, State ZIP:

Carlsbad, NM 88220 3122 National parks Hwy

9898540852

PLU 21 BD 104H, 123H, & 124H

Rush

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		4 0	163	dizlas	1	a Shing	mondo	1	myor hopore
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	g	•	Received by: (Signature)	Received	ure)	Relinquished by: (Signature)
	, it assigns standard terms and conditions are due to circumstances beyond the control swill be enforced unless previously negotiated.	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 contro 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 negotia	any to Eurofins Xensses or expenses in mitted to Eurofins Xe	ilent composor for any local	e order from ci responsibility \$5 for each sa	tutes a valid purchase shall not assume any oject and a charge of	of samples constit it of samples and s applied to each pro	and relinquishment able only for the cos ge of \$85.00 will be	ce: Signature of this document srvice. Eurofins Xenco will be li urofins Xenco. A minimum chai
7470 / 7471	^A g TI ∪ Hg: 1631 / 245.1 / 7470 / 747	Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Sb As Ba Be C	RA Sb	6010: 8RC	TCLP / SPLP 6010: 8RCRA	zed	(s) to be analyz	Circle Method(s) and Metal(s) to be analyzed
Sn U V Zn	Mg Mn Mo Ni K Se Ag SiO₂ Na Sr Tl Sn U V Zn	BRCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn	As Ba Be B	Al Sb	Texas 11	CRA 13PPM	SR.	200 8 / 6020-	Total 200 7 / 6010 2
				-					
				-	1			+	
NAPP2211151438	2								
NAPP2211651017,	ZZ								
NAPP2209736479,	22			+	+				
Incident Numbers:				+	+		-		
				+					
Cost Centers: 1666351001, 1666401001, 166601001	1666		×	×	Grab/	2,55 0.5	6/17/2022	S	SS07
Sample Comments	80		TPH (8	CHLO	Grab/ Comp	Time Depth	Date Sampled	n Matrix	Sample Identification
NaOH+Ascorbic Acid: SAPC	NaOH++		015)	SIDE	C C		Corrected Temperature		Total Containers:
Zn Acetate+NaOH: Zn	Zn Acet	890-2429 Chain of Custody		S IE	6	Reading:	Temperature Reading	Yes No NIA	Sample Custody Seals:
Na ₂ S ₂ O ₃ : NaSO ₃	Na ₂ S ₂ O.		. A:		ない	tor:	Correction Factor	Yes No MA	Cooler Custody Seals:
NaHSO, NABIS	NaHSO.				2007	D. Tans	Thermometer ID:	(res) No	Samples Received Intact:
Ŧ	H ₃ PO ₄ : HP)	nete	No No	Wet Ice: R	Yes (No)	Temp Blank:	SAMPLE RECEIPT
H ₂ NaOH: Na	H ₂ S0₄: H ₂			ers	oy 4:30pm	the lab, if received by 4:30pm			PO#
							L		

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2429-1 SDG Number: 03E1558053

Login Number: 2429 **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	

Released to Imaging: 12/13/2022 2:43:30 PM

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-2429-1

 SDG Number: 03E1558053

List Source: Eurofins Midland
List Number: 2

List Creation: 06/21/22 10:52 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").

Released to Imaging: 12/13/2022 2:43:30 PM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2431-1

Laboratory Sample Delivery Group: 03E1558053 Client Project/Site: PLU 21 BD 104H, 123H, 124H

Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMPR

Authorized for release by: 9/13/2022 11:53:05 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H, 123H, 124H

Laboratory Job ID: 890-2431-1 SDG: 03E1558053

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Definitions/Glossary

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier **Qualifier Description**

LCS and/or LCSD is outside acceptance limits, high biased.

F1 MS and/or MSD recovery exceeds control limits.

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE) DL

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) Minimum Detectable Concentration (Radiochemistry) MDC

MDL Method Detection Limit Minimum Level (Dioxin) ML 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

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RI 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

Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Job ID: 890-2431-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2431-1

REVISION

The report being provided is a revision of the original report sent on 6/24/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID change.

Report revision history

Receipt

The sample was received on 6/17/2022 4:33 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 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: 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) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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: 890-2431-1

Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Client Sample ID: SS02 Lab Sample ID: 890-2431-1 Date Collected: 06/17/22 12:41 Date Received: 06/17/22 16:33

Sample Depth: 0.5

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
Toluene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
o-Xylene	< 0.00199	U *+	0.00199	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 01:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130			06/21/22 14:42	06/22/22 01:14	
1,4-Difluorobenzene (Surr)	103		70 - 130			06/21/22 14:42	06/22/22 01:14	1
Method: Total BTEX - Total	BTEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/22/22 12:17	1
Method: 8015 NM - Diesel R	ange Organic	e (DRO) (O	3C)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	5070		49.9	mg/Kg			06/22/22 11:20	1
Method: 8015B NM - Diesel	Range Organ	ics (DRO)	(GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		06/21/22 11:35	06/22/22 04:09	1
Diesel Range Organics (Over C10-C28)	3910		49.9	mg/Kg		06/21/22 11:35	06/22/22 04:09	1
Oll Range Organics (Over C28-C36)	1160		49.9	mg/Kg		06/21/22 11:35	06/22/22 04:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	97	_	70 - 130			06/21/22 11:35	06/22/22 04:09	1
o-Terphenyl	113		70 - 130			06/21/22 11:35	06/22/22 04:09	1
Method: 300.0 - Anions, Ion	Chromatogra	phy - Solu	ıble					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

100

mg/Kg

16900

06/24/22 14:54

Surrogate Summary

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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)					
890-2426-A-1-C MS	Matrix Spike	110	99					
890-2426-A-1-D MSD	Matrix Spike Duplicate	91	93					
890-2431-1	SS02	91	103					
LCS 880-28063/1-A	Lab Control Sample	121	100					
LCSD 880-28063/2-A	Lab Control Sample Dup	110	104					
MB 880-27967/5-A	Method Blank	93	110					
MB 880-28063/5-A	Method Blank	95	107					
Surrogate Legend								
BFB = 4-Bromofluorobe	enzene (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)	
880-16078-A-21-B MS	Matrix Spike	82	79	
880-16078-A-21-C MSD	Matrix Spike Duplicate	86	82	
890-2431-1	SS02	97	113	
LCS 880-28045/2-A	Lab Control Sample	104	110	
LCSD 880-28045/3-A	Lab Control Sample Dup	104	113	
MB 880-28045/1-A	Method Blank	102	119	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-27967/5-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27967

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/20/22 15:20	06/21/22 12:25	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/20/22 15:20	06/21/22 12:25	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	93		70 - 130	06/20/22 15:20	06/21/22 12:25
1,4-Difluorobenzene (Surr)	110		70 - 130	06/20/22 15:20	06/21/22 12:25

20/22 15:20 06/21/22 12:25

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 28063

Matrix: Solid Analysis Batch: 28005

Lab Sample ID: MB 880-28063/5-A

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene 06/21/22 14:42 06/21/22 23:09 <0.00200 U 0.00200 mg/Kg Toluene mg/Kg 06/21/22 14:42 06/21/22 23:09 <0.00200 U 0.00200 Ethylbenzene mg/Kg 06/21/22 14:42 06/21/22 23:09 <0.00200 U 0.00200 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 06/21/22 14:42 06/21/22 23:09 o-Xylene <0.00200 U 0.00200 mg/Kg 06/21/22 14:42 06/21/22 23:09 Xylenes, Total <0.00400 U 0.00400 mg/Kg 06/21/22 14:42 06/21/22 23:09

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	06/21/22 14:42 06/21/22 23:09	1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/21/22 14:42 06/21/22 23:09	1

Lab Sample ID: LCS 880-28063/1-A

Matrix: Solid

Analysis Batch: 28005

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

Client Sample ID: Lab Control Sample Dup

70 - 130

105

Prep Batch: 28063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09845		mg/Kg		98	70 - 130	
Toluene	0.100	0.1157		mg/Kg		116	70 - 130	
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	
m-Xylene & p-Xylene	0.200	0.2330		mg/Kg		117	70 - 130	
o-Xylene	0.100	0.1311	*+	mg/Kg		131	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	121	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Benzene

Prep Type: Total/NA **Analysis Batch: 28005** Prep Batch: 28063 Spike LCSD LCSD %Rec Added Result Qualifier Limits Analyte Unit %Rec

0.100

Eurofins Carlsbad

RPD

6

RPD

Limit

0.1045

mg/Kg

Dil Fac

9/13/2022 (Rev. 1)

QC Sample Results

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

Lab Sample ID: LCSD 880-28063/2-A

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

LCSD LCSD %Rec **RPD** Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Toluene 0.100 0.1127 mg/Kg 113 70 - 130 3 35 Ethylbenzene 0.100 0.1015 mg/Kg 102 70 - 130 10 35 0.200 0.2046 102 70 - 130 35 m-Xylene & p-Xylene mg/Kg 13 0.100 35 o-Xylene 0.1150 mg/Kg 115 70 - 130 13

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: 890-2426-A-1-C MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Analysis Batch: 28005

Prep Type: Total/NA

Prep Batch: 28063

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier D %Rec Limits Unit Benzene <0.00199 U F1 0.100 0.07404 74 70 - 130 mg/Kg Toluene <0.00199 UF1 0.100 0.07758 mg/Kg 77 70 - 130 Ethylbenzene <0.00199 UF1 0.100 0.06116 F1 mg/Kg 61 70 - 130 m-Xylene & p-Xylene 0.200 0.1209 F1 60 <0.00398 U F1 mg/Kg 70 - 130 o-Xylene <0.00199 U F1 *+ 0.100 0.06788 F1 mg/Kg 68 70 - 130

MS MS

Surrogate	%Recovery Qualitier	Limits
4-Bromofluorobenzene (Surr)	110	70 - 130
1,4-Difluorobenzene (Surr)	99	70 - 130

Lab Sample ID: 890-2426-A-1-D MSD

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28063

Analysis Buton. 2000									I ICP L	Juton. I	-0000
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1	0.100	0.06494	F1	mg/Kg		65	70 - 130	13	35
Toluene	<0.00199	U F1	0.100	0.06696	F1	mg/Kg		67	70 - 130	15	35
Ethylbenzene	<0.00199	U F1	0.100	0.04899	F1	mg/Kg		49	70 - 130	22	35
m-Xylene & p-Xylene	<0.00398	U F1	0.201	0.09419	F1	mg/Kg		47	70 - 130	25	35
o-Xylene	<0.00199	U F1 *+	0.100	0.05296	F1	mg/Kg		53	70 - 130	25	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	91		70 - 130
1,4-Difluorobenzene (Surr)	93		70 - 130

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

Lab Sample ID: MB 880-28045/1-A

Matrix: Solid

Analysis Batch: 27998

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

Prep Batch: 28045

MB MB Result Qualifier RL Unit Analyte Prepared Analyzed Gasoline Range Organics <50.0 U 50.0 mg/Kg 06/21/22 11:35 06/21/22 21:37 (GRO)-C6-C10

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

Lab Sample ID: MB 880-28045/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Total/NA Analysis Batch: 27998** Prep Batch: 28045

	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	_	06/21/22 11:35	06/21/22 21:37	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			06/21/22 11:35	06/21/22 21:37	1
o-Terphenyl	119		70 - 130			06/21/22 11:35	06/21/22 21:37	1

Lab Sample ID: LCS 880- Matrix: Solid Analysis Batch: 27998	20045/2-A		Spike	ıcs	LCS	Onen	it Ou	inpic ib	Prep Type: Total/N/ Prep Batch: 2804 %Rec
Analyte			Added	_	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10			1000	992.5		mg/Kg		99	70 - 130
Diesel Range Organics (Over C10-C28)			1000	1042		mg/Kg		104	70 - 130
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	104		70 - 130						
o-Terphenyl	110		70 - 130						

Lab Salliple ID. LCSD 660-26043/3-A			•	Jilelit Ja	IIIPIE	ID. Lai		Sample	; Dup
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 27998							Prep E	atch: 2	28045
•	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	1000	1036		mg/Kg		104	70 - 130	4	20
Diesel Range Organics (Over C10-C28)	1000	1061		mg/Kg		106	70 - 130	2	20
1000 1000									

	LCSD		
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	104		70 - 130
o-Terphenyl	113		70 - 130

Lab Sample ID: 880-1607 Matrix: Solid Analysis Batch: 27998	8-A-21-B MS						CI	ient Sa	Prep Typ	//atrix Spike be: Total/NA atch: 28045
-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	905.3		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	799.1		mg/Kg		80	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	79		70 - 130							

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

Lab Sample ID: 880-16078-A-21-C MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA**

Matrix: Solid

Analysis Ratch: 27008

Analysis Batch: 27998									Prep Batch: 28045				
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	933.1		mg/Kg		89	70 - 130	3	20		
Diesel Range Organics (Over	<49.9	U	999	845.4		mg/Kg		85	70 - 130	6	20		

C10-C28)

	MSD	MSD	
Surrogate	%Recovery	Qualifier	
1-Chlorooctane	86		_

70 - 130 o-Terphenyl 82

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-27963/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Limits 70 - 130

Matrix: Solid

Analysis Batch: 28185

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			06/24/22 11:13	1

Lab Sample ID: LCS 880-27963/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 28185

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	 250	272.5		mg/Kg	_	109	90 - 110	

Lab Sample ID: LCSD 880-27963/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble**

Analysis Batch: 28185

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	274.8		mg/Kg	_	110	90 - 110	1	20

Client Sample ID: Matrix Spike Lab Sample ID: 890-2428-A-1-G MS **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	31300		12600	44610		ma/Ka		105	90 - 110	

Lab Sample ID: 890-2428-A-1-H MSD **Client Sample ID: Matrix Spike Duplicate Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

Analysis Baton. 20100											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	31300		12600	44560		ma/Ka		105	90 - 110		20

QC Association Summary

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

GC VOA

Duam Databa 070	~7
Prep Batch: 279	n/

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-27967/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 28005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Total/NA	Solid	8021B	28063
MB 880-27967/5-A	Method Blank	Total/NA	Solid	8021B	27967
MB 880-28063/5-A	Method Blank	Total/NA	Solid	8021B	28063
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	8021B	28063
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28063
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	28063
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28063

Prep Batch: 28063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Total/NA	Solid	5035	
MB 880-28063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28148

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID 890-2431-1	Client Sample ID	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 28045
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015B NM	28045
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28045
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28045
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28045
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID 890-2431-1	Client Sample ID	Prep Type Total/NA	Matrix Solid	Method F 8015NM Prep	Prep Batch
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28129

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum Job ID: 890-2431-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

HPLC/IC

Leach Batch: 27963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Soluble	Solid	DI Leach	
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2431-1	SS02	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	27963
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27963

Lab Chronicle

 Client: Ensolum
 Job ID: 890-2431-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

Client Sample ID: SS02 Lab Sample ID: 890-2431-1

Date Collected: 06/17/22 12:41

Date Received: 06/17/22 16:33

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			5.02 g	5 mL	28063	06/21/22 14:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/22/22 01:14	MR	EET MID
Total/NA	Analysis	Total BTEX		1			28148	06/22/22 12:17	SM	EET MID
Total/NA	Analysis	8015 NM		1			28129	06/22/22 11:20	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	28045	06/21/22 11:35	DM	EET MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 04:09	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	27963	06/21/22 12:47	SMC	EET MID
Soluble	Analysis	300.0		20			28185	06/24/22 14:54	SMC	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: 890-2431-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority	ority Program		Identification Number	Expiration Date	
Texas	NI	ELAP	T104704400-22-24	06-30-22	
The following analyte	o are included in this ren	art but the laboratory is r	and portified by the governing outhority	This list may include analytes for	
,	•	ort, but the laboratory is i	not certified by the governing authority.	This list may include analytes for	
the agency does not	offer certification.	•	, , ,	This list may include analytes for the	
,	•	Matrix	Analyte	This list may include analytes for v	
the agency does not	offer certification.	•	, , ,	This list may include analytes for v	

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2431-1

SDG: 03E1558053

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 21 BD 104H, 123H, 124H

Job ID: 890-2431-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2431-1	SS02	Solid	06/17/22 12:41	06/17/22 16:33	0.5

Chain of Custody

Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1286 Hobbs, NM (575) 392-7550, Carlisbad, NM (575) 988-3199

Project Manager: Company Name:

Ensolum, LLC

Ben Belill

Bill to: (if different)

Xenco

3122 National parks Hwy

Company Name: Address:

Garrett Green

XTO Energy, Inc.

3104 E. Green Street

Carlsbad, NM 88220

Work Order No:	0:
www.xenco.com Pag	m Page1of1_
Work Order Comments	r Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	ownfields 🗌 RRC 🔲 Superfund 📗
State of Project:	

Revised Date: 08/25/2020 Rev. 2020.2									
			,	-	,				10
			7/22/1639	6/17	at 1	a X t	Joneson	Way Da	a rated to
ure) Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Da	ıre)	Received by: (Signature)	Receive	Signature)	Relinquished by: (Signature)
	assigns standard terms and conditions due to circumstances beyond the control is be enforced unless previously negotiated.	volice: 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 ferms 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 services. It is not an advantable of the control of services are due to circumstances beyond the control of services are due to circumstances. These terms will be enforced unless previously negotiated to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated to each project and the control of th	ny to Eurofins Xences or expenses incestified to Eurofins Xenes	ent compa for any los mple subn	rchase order from cli e any responsibility rge of \$5 for each sa	titutes a valid pui I shall not assum project and a cha	t of samples cons ost of samples and e applied to each	ument and relinquishmen will be liable only for the country to the country of the country of \$85,00 will be	tice: Signature of this do- service. Eurofins Xenco Eurofins Xenco. A minim
Hg: 1631 / 245.1 / /4/0 / /4/1	Ag TI U Hg: 1631	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag	As Ba Be Co	RA Sb	LP 6010: 8RC	TCLP / SF	yzed	Circle Method(s) and Metal(s) to be analyzed	rcle Method(s) and
Va Sr TI Sn U V Zn	Ni K Se A	(2	s Ba Be B C	Al Sb /	13PPM Texas 11 Al Sb As	8RCRA 13PF	8	200.8 / 6020:	Total 200.7 / 6010
NAPP2211151438									
NAPP2211651017,									
NAPP2209/364/9, NAPP2210942764,									
Incident Numbers:				-					
1666401001, 166601001									
Cost Centers: 1666351001,			×	1 ×	0.5' Grab/	12;41	6/17/2022	S	SS05
Sample Comments			TPH (8	# of CHLOF	Depth Grab/ Comp C	Time Sampled	Date Sampled	ication Matrix	Sample Identification
NaOH+Ascorbic Acid: SAPC		, in the second		RIDE	0.4	mperature:	Corrected Temperature:		Total Containers:
Zn Acetate+NaOH: Zn		090-2431 Chain of Custody	-	S (E	4.0	Reading:	Temperature Reading:		Sample Custody Seals:
Na ₂ S ₂ O ₃ : NaSO ₃					ر ان	actor:	Correction Factor:	Yes No (NIA)	Cooler Custody Seals:
NaHSO4: NABIS				_	103 HU	ĪD	Thermometer ID:		Samples Received Intact
H ₃ PO ₄ : HP				.0)	No No	Wet Ice:	Yes 🔞	Temp Blank:	SAMPLE RECEIPT
H ₂ S0 ₄ : H ₂ NaOH: Na	_			rs	the lab, if received by 4:30pm	the lab, if rece			PO #
		-			TAT starts the day received by	TAT starts the	\e5e	(Specy Par)	Sampler's Name:
Cool: Cool MeOH: Me						Due Date:	Y, NM	EDDY COUNTY, NM	Project Location:
None: NO DI Water: H ₂ O				Code	Rush	☑ Routine	53	03E1558053	Project Number:
Preservative Codes		ANALYSIS REQUEST		_	Turn Around	Turn .	23H, & 124H	PLU 21 BD 104H, 123H, & 124H	Project Name:
ADaP1 LJ Other:	Deliverables: EDD L. ADah	Delive		1.com	Email: bbelill@ensolum.com	Email		9898540852	Phone: 9
SI/USI IRRP Levelly	Level III		Carlsbad, NM 88220	Car	City, State ZIP:			Carlsbad, NM 88220	City, State ZIP: C
]						111		

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2431-1 SDG Number: 03E1558053

Login Number: 2431 **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	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2431-1 SDG Number: 03E1558053

Login Number: 2431 **List Source: Eurofins Midland** List Creation: 06/21/22 10:52 AM List Number: 2

Creator: Rodriguez, Leticia

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2874-1

Laboratory Sample Delivery Group: 03E1558048 Client Project/Site: PLU 21 BD 104H 123H 124H

For:

eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:24:17 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

EOL

Have a Question?

.....LINKS

Review your project results through

Received by OCD: 9/21/2022 3:08:06 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 12/13/2022 2:43:30 PM 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
 Laboratory Job ID: 890-2874-1

 Project/Site: PLU 21 BD 104H 123H 124H
 SDG: 03E1558048

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Definitions/Glossary

Job ID: 890-2874-1 Client: Ensolum Project/Site: PLU 21 BD 104H 123H 124H

SDG: 03E1558048

Qualifiers

GC VOA

Qualifier **Qualifier Description** S1-Surrogate recovery exceeds control limits, low biased.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased. U 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

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" Minimum Detectable Activity (Radiochemistry) MDA MDC Minimum Detectable Concentration (Radiochemistry)

MDL Method Detection Limit Minimum Level (Dioxin) ML 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)

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

Project/Site: PLU 21 BD 104H 123H 124H

Job ID: 890-2874-1

SDG: 03E1558048

Job ID: 890-2874-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2874-1

Receipt

The samples were received on 9/1/2022 9:21 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

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33652/2-A) and (LCSD 880-33652/3-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.

HPLC/IC

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

Project/Site: PLU 21 BD 104H 123H 124H

Client: Ensolum

Job ID: 890-2874-1

Lab Sample ID: 890-2874-1

SDG: 03E1558048

Matrix: Solid

Client Sample ID: PH01

Date Collected: 08/31/22 09:05 Date Received: 09/01/22 09:21

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 21:13	
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 21:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 21:13	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/09/22 12:42	09/10/22 21:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 21:13	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/09/22 12:42	09/10/22 21:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	68	S1-	70 - 130			09/09/22 12:42	09/10/22 21:13	1
1,4-Difluorobenzene (Surr)	99		70 - 130			09/09/22 12:42	09/10/22 21:13	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/12/22 10:05	1
: Method: 8015 NM - Diesel Range			DI	Unit	n	Propared	Analyzod	Dil Ea
: Method: 8015 NM - Diesel Range			DI.	11-14		Dogwood	Austral	D:: 5
• •		Qualifier	RL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/06/22 12:59	
Method: 8015 NM - Diesel Range Analyte Total TPH	Result <50.0	Qualifier U			<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC)	50.0	mg/Kg			09/06/22 12:59	1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte	Result <50.0 Ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier	50.0	mg/Kg	<u>D</u>	Prepared	09/06/22 12:59 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0	mg/Kg			09/06/22 12:59	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0 Ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U	50.0	mg/Kg Unit mg/Kg		Prepared	09/06/22 12:59 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	Result <50.0 ge Organics (Dige Result <50.0)	Qualifier U RO) (GC) Qualifier U	50.0 RL 50.0	mg/Kg		Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0 ge Organics (Dige Result <50.0)	Qualifier U RO) (GC) Qualifier U	50.0 RL 50.0	mg/Kg Unit mg/Kg		Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07 09/03/22 03:07	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07 09/03/22 03:07	Dil Face 1 1 1 1 Dil Face
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U RO) (GC) Qualifier U U	50.0 RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37 09/02/22 13:37 Prepared	09/06/22 12:59 Analyzed 09/03/22 03:07 09/03/22 03:07 09/03/22 03:07 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range 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	Qualifier U RO) (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37 09/02/22 13:37 Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07 09/03/22 03:07 09/03/22 03:07 Analyzed 09/03/22 03:07	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range 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 U RO) (GC) Qualifier U U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37 09/02/22 13:37 Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 03:07 09/03/22 03:07 09/03/22 03:07 Analyzed 09/03/22 03:07	Dil Fac Dil Fac 1 Dil Fac 1 Dil Fac Dil Fac Dil Fac

Client Sample ID: PH02

Date Collected: 08/31/22 09:20 Date Received: 09/01/22 09:21

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/09/22 12:42	09/10/22 21:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130			09/09/22 12:42	09/10/22 21:39	1

Eurofins Carlsbad

Lab Sample ID: 890-2874-2

Matrix: Solid

09/03/22 03:29

Matrix: Solid

Job ID: 890-2874-1

09/02/22 13:37

Prepared

Client: Ensolum SDG: 03E1558048 Project/Site: PLU 21 BD 104H 123H 124H

Client Sample ID: PH02 Lab Sample ID: 890-2874-2

Date Collected: 08/31/22 09:20 **Matrix: Solid** Date Received: 09/01/22 09:21

Sample Depth: 2

Method: 8021B - Volatile Organic	Compounds (GC) (Contir	nued)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102		70 - 130			09/09/22 12:42	09/10/22 21:39	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Total BTEX	<0.00396	U	0.00396	mg/Kg			09/12/22 10:05	1
Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/06/22 12:59	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/02/22 13:37	09/03/22 03:29	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/02/22 13:37	09/03/22 03:29	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/02/22 13:37	09/03/22 03:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

o-Terphenyl	124	70 - 130		C	09/02/22 13:37	09/03/22 03:29	1
Method: 200.0 Anione Ion Chromotog	ranhy Calubia						
Method: 300.0 - Anions, Ion Chromatog	rapny - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

70 - 130

127

Result Qualifier

<50.0 U

Chloride 5.00 mg/Kg 09/09/22 03:30 51.7 Lab Sample ID: 890-2874-3 **Client Sample ID: PH03**

Date Collected: 08/31/22 09:30 Date Received: 09/01/22 09:21

Analyte

Total TPH

1-Chlorooctane

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/09/22 12:42	09/10/22 22:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	91		70 - 130			09/09/22 12:42	09/10/22 22:05	1
1,4-Difluorobenzene (Surr)	103		70 - 130			09/09/22 12:42	09/10/22 22:05	1
Method: Total BTEX - Total B1	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/12/22 10:05	1

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Analyzed

09/06/22 12:59

RL

50.0

Unit

mg/Kg

Dil Fac

Matrix: Solid

Lab Sample ID: 890-2874-3

Job ID: 890-2874-1

Client: Ensolum Project/Site: PLU 21 BD 104H 123H 124H SDG: 03E1558048

Client Sample ID: PH03 Date Collected: 08/31/22 09:30

Date Received: 09/01/22 09:21

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/03/22 03:50	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/03/22 03:50	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/03/22 03:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	121		70 - 130			09/02/22 13:37	09/03/22 03:50	1
o-Terphenyl	119		70 - 130			09/02/22 13:37	09/03/22 03:50	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: PH04 Lab Sample ID: 890-2874-4 Date Collected: 08/31/22 09:40 Matrix: Solid

Date Received: 09/01/22 09:21

Sample Depth: 2

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:42	09/10/22 22:30	
Toluene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:42	09/10/22 22:30	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:42	09/10/22 22:30	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/09/22 12:42	09/10/22 22:30	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:42	09/10/22 22:30	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/09/22 12:42	09/10/22 22:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			09/09/22 12:42	09/10/22 22:30	1
1,4-Difluorobenzene (Surr)	105		70 - 130			09/09/22 12:42	09/10/22 22:30	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			09/12/22 10:05	1
•								
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL 49.9		<u>D</u>	Prepared	Analyzed 09/06/22 12:59	Dil Fac
Analyte		Qualifier U		Unit	<u>D</u>	Prepared		
Analyte Total TPH . Method: 8015B NM - Diesel Rang	Result <49.9 ge Organics (Di	Qualifier U		Unit	<u>D</u>	Prepared Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9	Unit mg/Kg			09/06/22 12:59	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 04:12	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier U	49.9	Unit mg/Kg		Prepared	09/06/22 12:59 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 04:12	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 04:12 09/03/22 04:12	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 13:37 09/02/22 13:37	09/06/22 12:59 Analyzed 09/03/22 04:12 09/03/22 04:12	1 Dil Fac

Client Sample Results

Client: Ensolum Job ID: 890-2874-1 Project/Site: PLU 21 BD 104H 123H 124H SDG: 03E1558048

Lab Sample ID: 890-2874-4 **Client Sample ID: PH04** Matrix: Solid

Date Collected: 08/31/22 09:40 Date Received: 09/01/22 09:21

Sample Depth: 2

Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	644		5.01	mg/Kg			09/09/22 03:49	1

Surrogate Summary

Job ID: 890-2874-1 Client: Ensolum Project/Site: PLU 21 BD 104H 123H 124H SDG: 03E1558048

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)	
390-2873-A-1-C MS	Matrix Spike	93	98	
390-2873-A-1-D MSD	Matrix Spike Duplicate	85	101	
890-2874-1	PH01	68 S1-	99	
390-2874-2	PH02	64 S1-	102	
390-2874-3	PH03	91	103	
390-2874-4	PH04	92	105	
CS 880-34108/1-A	Lab Control Sample	89	102	
LCSD 880-34108/2-A	Lab Control Sample Dup	92	102	
MB 880-34108/5-A	Method Blank	62 S1-	91	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18785-A-1-E MS	Matrix Spike	90	78	
880-18785-A-1-F MSD	Matrix Spike Duplicate	90	77	
890-2874-1	PH01	125	125	
890-2874-2	PH02	127	124	
890-2874-3	PH03	121	119	
890-2874-4	PH04	105	104	
LCS 880-33652/2-A	Lab Control Sample	141 S1+	144 S1+	
LCSD 880-33652/3-A	Lab Control Sample Dup	144 S1+	146 S1+	
MB 880-33652/1-A	Method Blank	110	115	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: Ensolum Project/Site: PLU 21 BD 104H 123H 124H

Job ID: 890-2874-1 SDG: 03E1558048

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34108/5-A

Lab Sample ID: LCS 880-34108/1-A

Lab Sample ID: LCSD 880-34108/2-A

Matrix: Solid

o-Xylene

Matrix: Solid

Analysis Batch: 34150

Matrix: Solid Analysis Batch: 34150 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34108

	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 18:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 18:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 18:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:42	09/10/22 18:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:42	09/10/22 18:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 12:42	09/10/22 18:08	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	F	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	62	S1-	70 - 130	09/0	09/22 12:42	09/10/22 18:08	1
1,4-Difluorobenzene (Surr)	91		70 - 130	09/0	09/22 12:42	09/10/22 18:08	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34108

Analysis Batch: 34150 Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits mg/Kg Benzene 0.100 0.1052 105 70 - 130 Toluene 0.100 0.1014 mg/Kg 101 70 - 130 0.100 0.09875 Ethylbenzene mg/Kg 99 70 - 130 0.200 0.2025 101 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 70 - 130

0.1001

mg/Kg

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

100

Prep Batch: 34108

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1002 mg/Kg 100 70 - 130 5 35 Toluene 0.100 0.09534 mg/Kg 95 70 - 130 6 35 Ethylbenzene 0.100 0.08911 mg/Kg 89 70 - 130 10 35 0.200 0.1817 m-Xylene & p-Xylene mg/Kg 91 70 - 130 11 35 0.100 0.09305 o-Xylene mg/Kg 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1.4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-2873-A-1-C MS

Matrix: Solid

Analysis Batch: 34150

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

Prep Batch: 34108

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0996	0.08819		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.0996	0.08582		mg/Kg		86	70 - 130	

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Prep Batch: 34108

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Job ID: 890-2874-1 Project/Site: PLU 21 BD 104H 123H 124H SDG: 03E1558048

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

Lab Sample ID: 890-2873-A-1-C MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 34150

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.0996	0.08214		mg/Kg		82	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.199	0.1681		mg/Kg		84	70 - 130	
o-Xylene	<0.00201	U	0.0996	0.08247		mg/Kg		83	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 93 1,4-Difluorobenzene (Surr) 98 70 - 130

Lab Sample ID: 890-2873-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 34150

Analysis Batch: 34150							Prep Batch: 34108				
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0998	0.09043		mg/Kg		91	70 - 130	3	35
Toluene	<0.00201	U	0.0998	0.08837		mg/Kg		89	70 - 130	3	35
Ethylbenzene	<0.00201	U	0.0998	0.08669		mg/Kg		87	70 - 130	5	35
m-Xylene & p-Xylene	<0.00402	U	0.200	0.1765		mg/Kg		88	70 - 130	5	35
o-Xylene	<0.00201	U	0.0998	0.08671		mg/Kg		87	70 - 130	5	35

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

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

Lab Sample ID: MB 880-33652/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 33652

Analysis Batch: 33584

	MB	IAID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/02/22 19:12	1
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/02/22 19:12	1
C10-C28) OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 13:37	09/02/22 19:12	1
	Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Gasoline Range Organics <50.0 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 C10-C28)	Gasoline Range Organics <50.0 U (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U C10-C28)	Gasoline Range Organics <50.0 U	Gasoline Range Organics	Gasoline Range Organics	Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/02/22 13:37 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/02/22 13:37 C10-C28)	Gasoline Range Organics <50.0 U 50.0 mg/Kg 09/02/22 13:37 09/02/22 19:12 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg 09/02/22 13:37 09/02/22 19:12 C10-C28)

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 1-Chlorooctane 110 09/02/22 13:37 09/02/22 19:12 o-Terphenyl 115 70 - 130 09/02/22 13:37 09/02/22 19:12

Lab Sample ID: LCS 880-33652/2-A **Client Sample ID: Lab Control Sample**

Analysis Batch: 33584

Matrix: Solid

7 mary or Datom Cook								- Dato 00002
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	897.3		mg/Kg		90	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	906.9		mg/Kg		91	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Prep Batch: 33652

Job ID: 890-2874-1 Project/Site: PLU 21 BD 104H 123H 124H

SDG: 03E1558048

Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 33652

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

Lab Sample ID: LCS 880-33652/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 33584

LCS	LCS	
%Recovery	Qualifier	Limits
 141	S1+	70 - 130
144	S1+	70 - 130

Lab Sample ID: LCSD 880-33652/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Surrogate 1-Chlorooctane o-Terphenyl

Client: Ensolum

Analysis Batch: 33584							Prep Batch: 33652		
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	916.7		mg/Kg		92	70 - 130	2	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	923.6		mg/Kg		92	70 - 130	2	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 144 S1+ 70 - 130 1-Chlorooctane o-Terphenyl 146 S1+ 70 - 130

Lab Sample ID: 880-18785-A-1-E MS

Matrix: Solid

Analysis Batch: 33584									Prep Batch: 33652		
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	898.3		mg/Kg		88	70 - 130		
Diesel Range Organics (Over C10-C28)	<49.9	U	999	847.2		mg/Kg		85	70 - 130		

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 90 o-Terphenyl 78 70 - 130

Lab Sample ID: 880-18785-A-1-F MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Released to Imaging: 12/13/2022 2:43:30 PM

Analysis Batch: 33584									Prep	Batch:	33652
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	889.0		mg/Kg		87	70 - 130	1	20
Diesel Range Organics (Over	<49.9	U	998	842.9		mg/Kg		84	70 - 130	1	20

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	90		70 - 130
o-Terphenyl	77		70 - 130

QC Sample Results

Job ID: 890-2874-1 Client: Ensolum Project/Site: PLU 21 BD 104H 123H 124H

SDG: 03E1558048

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33691/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble Analysis Batch: 33933

MB MB Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 09/09/22 02:38

Lab Sample ID: LCS 880-33691/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Soluble

Analysis Batch: 33933 Spike LCS LCS %Rec

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

Lab Sample ID: LCSD 880-33691/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Soluble Analysis Batch: 33933

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit

Chloride 250 241.4 mg/Kg 90 - 110

Lab Sample ID: 890-2874-3 MS **Client Sample ID: PH03 Matrix: Solid**

Prep Type: Soluble Analysis Batch: 33933

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

251

541

Chloride mg/Kg Lab Sample ID: 890-2874-3 MSD **Client Sample ID: PH03**

769.3

mg/Kg

91

90 - 110

Matrix: Solid Prep Type: Soluble Analysis Batch: 33933

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 251 541 768.7 91 90 - 110 0 20

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H 123H 124H

Job ID: 890-2874-1 SDG: 03E1558048

GC VOA

Prep Batch: 34108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Total/NA	Solid	5035	
890-2874-2	PH02	Total/NA	Solid	5035	
890-2874-3	PH03	Total/NA	Solid	5035	
890-2874-4	PH04	Total/NA	Solid	5035	
MB 880-34108/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34108/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34108/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2873-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2873-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Total/NA	Solid	8021B	34108
890-2874-2	PH02	Total/NA	Solid	8021B	34108
890-2874-3	PH03	Total/NA	Solid	8021B	34108
890-2874-4	PH04	Total/NA	Solid	8021B	34108
MB 880-34108/5-A	Method Blank	Total/NA	Solid	8021B	34108
LCS 880-34108/1-A	Lab Control Sample	Total/NA	Solid	8021B	34108
LCSD 880-34108/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34108
890-2873-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34108
890-2873-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34108

Analysis Batch: 34261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Total/NA	Solid	Total BTEX	
890-2874-2	PH02	Total/NA	Solid	Total BTEX	
890-2874-3	PH03	Total/NA	Solid	Total BTEX	
890-2874-4	PH04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Total/NA	Solid	8015B NM	33652
890-2874-2	PH02	Total/NA	Solid	8015B NM	33652
890-2874-3	PH03	Total/NA	Solid	8015B NM	33652
890-2874-4	PH04	Total/NA	Solid	8015B NM	33652
MB 880-33652/1-A	Method Blank	Total/NA	Solid	8015B NM	33652
LCS 880-33652/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33652
LCSD 880-33652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33652
880-18785-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	33652
880-18785-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33652

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Total/NA	Solid	8015NM Prep	
890-2874-2	PH02	Total/NA	Solid	8015NM Prep	
890-2874-3	PH03	Total/NA	Solid	8015NM Prep	
890-2874-4	PH04	Total/NA	Solid	8015NM Prep	
MB 880-33652/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33652/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

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Analysis Batch: 33584

QC Association Summary

 Client: Ensolum
 Job ID: 890-2874-1

 Project/Site: PLU 21 BD 104H 123H 124H
 SDG: 03E1558048

GC Semi VOA (Continued)

Prep Batch: 33652 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-33652/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-18785-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-18785-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep B	3atch
890-2874-1	PH01	Total/NA	Solid	8015 NM	
890-2874-2	PH02	Total/NA	Solid	8015 NM	
890-2874-3	PH03	Total/NA	Solid	8015 NM	
890-2874-4	PH04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Soluble	Solid	DI Leach	
890-2874-2	PH02	Soluble	Solid	DI Leach	
890-2874-3	PH03	Soluble	Solid	DI Leach	
890-2874-4	PH04	Soluble	Solid	DI Leach	
MB 880-33691/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33691/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33691/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2874-3 MS	PH03	Soluble	Solid	DI Leach	
890-2874-3 MSD	PH03	Soluble	Solid	DI Leach	

Analysis Batch: 33933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2874-1	PH01	Soluble	Solid	300.0	33691
890-2874-2	PH02	Soluble	Solid	300.0	33691
890-2874-3	PH03	Soluble	Solid	300.0	33691
890-2874-4	PH04	Soluble	Solid	300.0	33691
MB 880-33691/1-A	Method Blank	Soluble	Solid	300.0	33691
LCS 880-33691/2-A	Lab Control Sample	Soluble	Solid	300.0	33691
LCSD 880-33691/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33691
890-2874-3 MS	PH03	Soluble	Solid	300.0	33691
890-2874-3 MSD	PH03	Soluble	Solid	300.0	33691

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Project/Site: PLU 21 BD 104H 123H 124H

Job ID: 890-2874-1 SDG: 03E1558048

Client Sample ID: PH01

Date Collected: 08/31/22 09:05 Date Received: 09/01/22 09:21

Lab Sample ID: 890-2874-1

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	34108	09/09/22 12:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34150	09/10/22 21:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34261	09/12/22 10:05	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33845	09/06/22 12:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33652	09/02/22 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33584	09/03/22 03:07	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 03:25	CH	EET MID

Client Sample ID: PH02 Lab Sample ID: 890-2874-2

Date Collected: 08/31/22 09:20

Date Received: 09/01/22 09:21

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			5.05 g	5 mL	34108	09/09/22 12:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34150	09/10/22 21:39	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34261	09/12/22 10:05	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33845	09/06/22 12:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33652	09/02/22 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33584	09/03/22 03:29	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 03:30	CH	EET MID

Client Sample ID: PH03 Lab Sample ID: 890-2874-3 Date Collected: 08/31/22 09:30 **Matrix: Solid**

Date Received: 09/01/22 09:21

	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	34108	09/09/22 12:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34150	09/10/22 22:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34261	09/12/22 10:05	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33845	09/06/22 12:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33652	09/02/22 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33584	09/03/22 03:50	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 03:35	CH	EET MID

Client Sample ID: PH04 Lab Sample ID: 890-2874-4

Date Collected: 08/31/22 09:40 Date Received: 09/01/22 09:21

	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	34108	09/09/22 12:42	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34150	09/10/22 22:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34261	09/12/22 10:05	AJ	EET MID

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Page 16 of 23

Matrix: Solid

Lab Chronicle

 Client: Ensolum
 Job ID: 890-2874-1

 Project/Site: PLU 21 BD 104H 123H 124H
 SDG: 03E1558048

Client Sample ID: PH04 Lab Sample ID: 890-2874-4

Date Collected: 08/31/22 09:40
Date Received: 09/01/22 09:21

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			33845	09/06/22 12:59	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33652	09/02/22 13:37	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33584	09/03/22 04:12	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 03:49	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2874-1 Project/Site: PLU 21 BD 104H 123H 124H

SDG: 03E1558048

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 Texas	Ni	ELAP	T104704400-22-24	06-30-23
	•	it the laboratory is not certifi	ed by the governing authority. This list m	ay include analytes fo
the agency does not of	fer certification.	•		ay include analytes fo
the agency does not of Analysis Method	•	Matrix	Analyte	ay include analytes fo
the agency does not of	fer certification.	•		ay include analytes fo

Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H 123H 124H

Job ID: 890-2874-1

SDG: 03E1558048

aboratory	
<u> </u>	
ET MID	
ET MID	

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
015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
0.00	Anions, Ion Chromatography	MCAWW	EET MID
035	Closed System Purge and Trap	SW846	EET MID
015NM Prep	Microextraction	SW846	EET MID
I 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 21 BD 104H 123H 124H

Job ID: 890-2874-1

SDG: 03E1558048

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2874-1	PH01	Solid	08/31/22 09:05	09/01/22 09:21	2
890-2874-2	PH02	Solid	08/31/22 09:20	09/01/22 09:21	2
890-2874-3	PH03	Solid	08/31/22 09:30	09/01/22 09:21	2
890-2874-4	PH04	Solid	08/31/22 09:40	09/01/22 09:21	2

Revised Date 08/25/2020 Rev 2020

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

Retinquished by: (Signature)

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

Environment Testing

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Work Order No:

Project Manager: Be	Ben Belill				Bill to: (if different)	ent)	Garret Green	Green			Work Ord	Work Order Comments	
Company Name: Er	Ensolum				Company Name	me:	XTO Energy	nergy			Program: UST/PST PRP Brownfleids RRC Superfund	rownfleids 🗌 RRC 📗 Superfu	□ pu
Address: 31	3122 National Parks Hwy	rks Hw	Ŋ		Address:		3104 E	3104 E. Green St.	St.		State of Project:		1
City, State ZIP: Ca	Carlsbad, NM 88220	220			City, State ZIP:	ė.	Cartsb	Carlsbad, NM 88220	88220		Reporting: Level II Level III PST/UST TRRP	PST/UST TRRP Level IV	
	303-887-2948			Email: Garre	Garret. Gree	π(© EXX	i. Green@ExxonMobil.com	com			Deliverables: EDD 🔲 AD	ADaPT 🔲 Omer:	
Project Name:	PLU 21 BD 104H, 123H, 124H	4, 123	H, 124H	Tum	Turn Around					ANALYSIS REQUEST	UEST	Preservative Codes	6
Project Number:	03E1558048	38048		☑ Routine	☐ Rush	Pres. Code						None: NO DI Water: H ₂ O	H ₂ O
Project Location:	32.10934, -103.88918	103.88		Due Date:								Cool: Cool MeOH: Me	e
Sampler's Name:	Kase Parker	arker		TAT starts the	TAT starts the day received by	À						HCL: HC HNO3: HN	7
PO #:				the lab, if rec	the lab, if received by 4:30pm							H ₂ S0 ₄ : H ₂ NaOH: Na	æ
SAMPLE RECEIPT	T Temp Blank:	ik:	Yes No	Wet loe:	(Yes)No	əşəu	(0					H₃PO₄: HP	
Samples Received Intact:	tct: (Yes) No		Thermometer ID:	17	CO-MI	IL SIL	300					NaHSO4: NABIS	
Cooler Custody Seals:	Yes No MIA Correction Factor:	MAN	Correction Fa	actor:	-0.	C Pa	:Aq					Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	Yes No	N/A	N/A / Temperature Reading:	Reading:	9.1		3) S			890-2874 Chain of Custody	Sustady	Zn Acetate+NaOH: Zn	
Total Containers:)	Corrected Temperature:	mperature:	١. ٢		BE		1208			NaOH+Ascorbic Acid: SAPC	O
Sample Identification		Matrix	Date Sampled	Time	Depth Grab/ Comp	b/ # of	снгов	08) H T	s) X3T8			Sample Comments	
PH01		S	8/31/2022	9:05	2.		×	×	×			Incident ID:	
PH02		S	8/31/2022	9:20	2.		×	×	×			nAPP2209736479	
PH03		S	8/31/2022	9:30	2.		×	×	×			nAPP2211651017	
PH04		S	8/31/2022	9:40	2.		×	×	×			nAPP2211151438	
												CC:	
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		T											
Total 200.7 / 6010	0 200.8 / 6020:	ö	8	BRCRA 13PPM	PM Texas 11	₹	Sb As Ba	Ba Be	m	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K	Se A	2 Na Sr TI Sn U V Zn	Γ
Circle Method(s) and Metal(s) to be analyzed	Metal(s) to be a	ınalyze	þé	TCLP / SI	TCLP / SPLP 6010: 8RCRA	3RCRA	Sb As	Ba E	e Cd Cr	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U		Hg: 1631 / 245.1 / 7470 / 7471	
Notice: Signature of this doc	cument and relinguish	ment of	samples cons	titutes a valid p	vurchase order fr	rom client	company	o Eurofi	ns Xenco, Its	iffiliates and subcontractors.	Notice: Slangture 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	will be liable only for th	the cost	of samples an	d shall not assu	ime any respons	sibility for	any losses	or expe	nses incurred	by the client if such losses an	responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control	10	
of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of	num charge of \$85.00 w	will be a	oplied to each	project and a ci		ach samp	e submitte	d to Eur	ofins Xenco, n	ut not analyzed. Inese terms	\$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	ared.	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2874-1 SDG Number: 03E1558048

Login Number: 2874 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.	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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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2874-1

SDG Number: 03E1558048

List Source: Eurofins Midland List Creation: 09/02/22 10:54 AM

Creator: Rodriguez, Leticia

Login Number: 2874

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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<6mm (1/4").



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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2881-1

Laboratory Sample Delivery Group: 03E1558048 Client Project/Site: PLU 21 BD 104H,123H,124H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:20:24 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum Laboratory Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H

SDG: 03E1558048

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Definitions/Glossary

Client: Ensolum Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

Qualifiers

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

Glossary

DLC

NC

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	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

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)

Decision Level Concentration (Radiochemistry)

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

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

QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)

Not Calculated

The porting Limit of Thequested Limit (Thadlochemistry)	RL	Reporting Limit or Requested Limit (Radiochemistry)
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	rtolatiro i ordont Billoronos, a mode
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

TNTC Too Numerous To Count

Eurofins Carlsbad

Released to Imaging: 12/13/2022 2:43:30 PM

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1

SDG: 03E1558048

Job ID: 890-2881-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2881-1

Receipt

The samples were received on 9/2/2022 2:56 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-34162/1-A), (LCSD 880-34162/2-A) and (890-2881-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-34014/2-A) and (LCSD 880-34014/3-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.

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: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

Client Sample ID: FS01 Lab Sample ID: 890-2881-1

Date Collected: 09/01/22 12:30 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 19:46	
Toluene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 19:46	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 19:46	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 19:46	
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 19:46	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 19:46	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		70 - 130			09/11/22 14:51	09/11/22 19:46	
1,4-Difluorobenzene (Surr)	80		70 - 130			09/11/22 14:51	09/11/22 19:46	
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 09:55	
Analyte Total TPH	<50.0	Qualifier U	RL 50.0	Unit mg/Kg	D	Prepared	Analyzed 09/09/22 10:25	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 10:25	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 20:27	
(GRO)-C6-C10	<50.0		50.0	mg/Kg		09/08/22 14:10	09/08/22 20:27	
Diesel Range Organics (Over C10-C28)	\30.0	U	50.0	mg/Kg		09/06/22 14.10	09/06/22 20.27	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 20:27	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	120		70 - 130			09/08/22 14:10	09/08/22 20:27	
o-Terphenyl	112		70 - 130			09/08/22 14:10	09/08/22 20:27	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro	0	Soluble Qualifier	RL_	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa

Lab Sample ID: 890-2881-2 **Client Sample ID: FS02**

Date Collected: 09/01/22 12:35 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/11/22 20:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/11/22 14:51	09/11/22 20:06	

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Matrix: Solid

Client: Ensolum Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1

SDG: 03E1558048

Client Sample ID: FS02 Lab Sample ID: 890-2881-2 Date Collected: 09/01/22 12:35

Matrix: Solid

Date Received: 09/02/22 14:56 Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
Method. 002 1D - Volatile Organic Compounds	(OO) (Oolillillided)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	92	70 - 130	09/11/22 14:51	09/11/22 20:06	

Method:	Total	RTFX	- Total	RTFX	Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397 U	0.00397	ma/Ka			09/12/22 09:55	1

Mothod: 9015 NM - Diocol Pango Oro	rapice (DPO) (CC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	ma/Ka			09/09/22 10:25	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trange Or	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 21:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 21:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 21:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Quaimer	Limits	Prepared	Analyzea	DII Fac
1-Chlorooctane	105	70 - 130	09/08/22 14:10	09/08/22 21:31	1
o-Terphenyl	97	70 - 130	09/08/22 14:10	09/08/22 21:31	1
_					

Method: 300.0	J - Anions, Ion	Chromatography	- Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	328	4.97	mg/Kg			09/09/22 13:02	1

Client Sample ID: FS03 Lab Sample ID: 890-2881-3 Matrix: Solid

Date Collected: 09/01/22 12:40 Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

motifica. COLID Tolatile Orga	ino compoundo ((33)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 20:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			09/11/22 14:51	09/11/22 20:27	1
1,4-Difluorobenzene (Surr)	86		70 - 130			09/11/22 14:51	09/11/22 20:27	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402	ma/Ka			09/12/22 09:55	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC	Method: 8015 NM -	- Diesel Range	Organics (DRO)	(GC
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Analyte	Result Qualifier	r RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/09/22 10:25	1

Project/Site: PLU 21 BD 104H,123H,124H

Client: Ensolum

Job ID: 890-2881-1

SDG: 03E1558048

Client Sample ID: FS03

Date Collected: 09/01/22 12:40 Date Received: 09/02/22 14:56

Sample Depth: 2'

Lab Sample ID: 890-2881-3

Matrix: Solid

Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 21:53	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 21:53	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 21:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/08/22 14:10	09/08/22 21:53	1
o-Terphenyl	97		70 - 130			09/08/22 14:10	09/08/22 21:53	1
- Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	103		5.00	mg/Kg			09/09/22 13:11	1

Lab Sample ID: 890-2881-4 **Client Sample ID: FS04** Matrix: Solid

Date Collected: 09/01/22 12:45 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/11/22 14:51	09/11/22 20:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			09/11/22 14:51	09/11/22 20:47	1
1,4-Difluorobenzene (Surr)	91		70 - 130			09/11/22 14:51	09/11/22 20:47	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403	U	0.00403	mg/Kg			09/12/22 09:55	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	55.9		49.8	mg/Kg			09/09/22 10:25	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	55.9		49.8	mg/Kg		09/08/22 14:10	09/08/22 22:14	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/08/22 14:10	09/08/22 22:14	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/08/22 14:10	09/08/22 22:14	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			09/08/22 14:10	09/08/22 22:14	1
o-Terphenyl	113		70 - 130			09/08/22 14:10	09/08/22 22:14	1

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9/12/2022

Matrix: Solid

Job ID: 890-2881-1

Client: Ensolum Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

Client Sample ID: FS04 Lab Sample ID: 890-2881-4

Date Collected: 09/01/22 12:45 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 300.0 - Anions, Ion Chrom	atography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	333		5.02	mg/Kg			09/09/22 13:20	1

Client Sample ID: FS05 Lab Sample ID: 890-2881-5

Date Collected: 09/01/22 12:50 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 21:08	
Toluene	< 0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 21:08	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 21:08	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 21:08	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 21:08	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 21:08	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			09/11/22 14:51	09/11/22 21:08	
1,4-Difluorobenzene (Surr)	92		70 - 130			09/11/22 14:51	09/11/22 21:08	
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 09:55	
Method: 8015 NM - Diesel Range	•	, , ,				Drawarad	Analyzad	Dil F
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: 8015 NM - Diesel Range	•	Qualifier			<u>D</u>	Prepared	Analyzed 09/09/22 10:25	Dil Fa
Method: 8015 NM - Diesel Range Analyte	Result <49.8 ge Organics (Di	Qualifier U RO) (GC)	RL 49.8	Unit mg/Kg	<u>D</u>	Prepared		
Method: 8015 NM - Diesel Range Analyte Total TPH	Result <49.8 ge Organics (Dige Result)	Qualifier U RO) (GC) Qualifier	RL	Unit mg/Kg	<u>D</u>	Prepared Prepared		Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.8 ge Organics (Di	Qualifier U RO) (GC) Qualifier	RL 49.8	Unit mg/Kg			09/09/22 10:25	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.8 ge Organics (Dige Result)	Qualifier U RO) (GC) Qualifier U	RL 49.8	Unit mg/Kg		Prepared	09/09/22 10:25 Analyzed	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D) Result <49.8 49.8	Qualifier U RO) (GC) Qualifier U	RL 49.8 RL 49.8	Unit mg/Kg Unit mg/Kg		Prepared 09/08/22 14:10	09/09/22 10:25 Analyzed 09/08/22 22:36	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U	RL 49.8 RL 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10	09/09/22 10:25 Analyzed 09/08/22 22:36 09/08/22 22:36	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U RO) (GC) Qualifier U U	RL 49.8 RL 49.8 49.8 49.8	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10	09/09/22 10:25 Analyzed 09/08/22 22:36 09/08/22 22:36	Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	Result	Qualifier U RO) (GC) Qualifier U U	RL 49.8 RL 49.8 49.8 49.8 49.8 Limits	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10 Prepared	09/09/22 10:25 Analyzed 09/08/22 22:36 09/08/22 22:36 09/08/22 22:36 Analyzed	Dil Fa
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.8	Qualifier U RO) (GC) Qualifier U U Qualifier	RL 49.8 RL 49.8 49.8 49.8 49.8 Limits 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10 Prepared 09/08/22 14:10	09/09/22 10:25 Analyzed 09/08/22 22:36 09/08/22 22:36 Analyzed 09/08/22 22:36	Dil Fa

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09/09/22 13:29

4.95

mg/Kg

329

Chloride

Client: Ensolum Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

Client Sample ID: FS08 Lab Sample ID: 890-2881-6

Date Collected: 09/01/22 13:05 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 21:28	
Toluene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 21:28	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 21:28	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 21:28	
o-Xylene	< 0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 21:28	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 21:28	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130			09/11/22 14:51	09/11/22 21:28	
1,4-Difluorobenzene (Surr)	87		70 - 130			09/11/22 14:51	09/11/22 21:28	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/12/22 09:55	
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/09/22 10:25	Dil Fa
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 22:57	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 22:57	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 22:57	
		Qualifier	Limits			Prepared	Analyzed	Dil Fa
Surrogate	%Recovery	4						
_		<u> </u>	70 - 130			09/08/22 14:10	09/08/22 22:57	
1-Chlorooctane		<u> </u>	70 - 130 70 - 130			09/08/22 14:10 09/08/22 14:10	09/08/22 22:57 09/08/22 22:57	
Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	109 103							
1-Chlorooctane o-Terphenyl	109 103 omatography -			Unit	D			Dil Fac

Client Sample ID: FS09 Lab Sample ID: 890-2881-7

Date Collected: 09/01/22 13:10 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 21:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/11/22 14:51	09/11/22 21:49	1

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Matrix: Solid

Client: Ensolum Project/Site: PLU 21 BD 104H,123H,124H Job ID: 890-2881-1

SDG: 03E1558048

Client Sample ID: FS09 Lab Sample ID: 890-2881-7 Date Collected: 09/01/22 13:10

Matrix: Solid

Date Received: 09/02/22 14:56 Sample Depth: 2'

Method: 8021B - Volati	le Organic Comp	ounds (GC)	(Continued)
modifical coaling foliati	io organio comp	, o a a o , o o ,	(Continuou,

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	84	70 - 130	09/11/22 14:51	09/11/22 21:49	1

Method: Total	BTEX -	Total BTEX	Calculation

Analyte		ualifier RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400 U	0.00400	mg/Kg			09/12/22 09:55	1

Mothod: 8015 NM - Diosal Panga	Organics (DRO) (GC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/09/22 10:25	1

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 23:18	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 23:18	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 23:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualit	fier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	103	70 - 130	09/08/22 14:10	09/08/22 23:18	1
o-Terphenyl	98	70 - 130	09/08/22 14:10	09/08/22 23:18	1

Method: 300	0.0 - Anions,	Ion Chroma	tography - 🤄	Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56.7	4.98	mg/Kg			09/09/22 14:06	1

Client Sample ID: FS10 Lab Sample ID: 890-2881-8 Matrix: Solid

Date Collected: 09/01/22 13:15 Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (GC)

		(/						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/11/22 14:51	09/11/22 22:09	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			09/11/22 14:51	09/11/22 22:09	1
1,4-Difluorobenzene (Surr)	93		70 - 130			09/11/22 14:51	09/11/22 22:09	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	KL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/12/22 09:55	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	:
Total TPH	<49.9	U	49.9	ma/Ka			09/09/22 10:25	1	

Client: Ensolum Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1 SDG: 03E1558048

Client Sample ID: FS10

Date Collected: 09/01/22 13:15 Date Received: 09/02/22 14:56

Sample Depth: 2'

Lab Sample ID: 890-2881-8

Matrix: Solid

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 23:40	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 23:40	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/08/22 23:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	123		70 - 130			09/08/22 14:10	09/08/22 23:40	
o-Terphenyl	112		70 - 130			09/08/22 14:10	09/08/22 23:40	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	92.3		4.98	mg/Kg			09/09/22 14:15	

Lab Sample ID: 890-2881-9 **Client Sample ID: FS11** Matrix: Solid

Date Collected: 09/01/22 13:20 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/11/22 22:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			09/11/22 14:51	09/11/22 22:30	1
1,4-Difluorobenzene (Surr)	89		70 - 130			09/11/22 14:51	09/11/22 22:30	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 09:55	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 10:25	1
Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 00:02	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 00:02	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 00:02	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	122		70 - 130			09/08/22 14:10	09/09/22 00:02	1
	113		70 - 130			09/08/22 14:10	09/09/22 00:02	

Matrix: Solid

Job ID: 890-2881-1

Client: Ensolum Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

Client Sample ID: FS11 Lab Sample ID: 890-2881-9

Date Collected: 09/01/22 13:20 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 300.0 - Anions, Ion	Chromatography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	181	4.98	mg/Kg			09/09/22 14:25	1

Client Sample ID: FS12 Lab Sample ID: 890-2881-10

Date Collected: 09/01/22 13:25 Date Received: 09/02/22 14:56

Sample Depth: 2'

Surrogate

o-Terphenyl

1-Chlorooctane

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 22:50	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 22:50	,
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 22:50	
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/11/22 22:50	
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/11/22 22:50	,
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/11/22 22:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			09/11/22 14:51	09/11/22 22:50	
1,4-Difluorobenzene (Surr)	92		70 - 130			09/11/22 14:51	09/11/22 22:50	
Method: Total BTEX - Total BTE. Analyte	Result	Qualifier	RL	Unit ma/Ka	<u>D</u>	Prepared	Analyzed	Dil Fa
Analyte Total BTEX	<0.00397	U	RL 0.00397	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 09/12/22 09:55	Dil Fa
Analyte	Result <0.00397	U			<u>D</u>	Prepared Prepared		Dil Fac
Analyte Total BTEX Method: 8015 NM - Diesel Range	Result <0.00397	U O) (GC) Qualifier	0.00397	mg/Kg	_ =		09/12/22 09:55	,
Analyte Total BTEX Method: 8015 NM - Diesel Range Analyte	Result <0.00397	U O) (GC) Qualifier U	0.00397	mg/Kg	_ =		09/12/22 09:55 Analyzed	,
Analyte Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR) Result <50.0 ge Organics (DI)	U O) (GC) Qualifier U	0.00397	mg/Kg	_ =		09/12/22 09:55 Analyzed	Dil Fa
Analyte Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte	e Organics (DR) Result <50.0 ge Organics (DI)	O) (GC) Qualifier U RO) (GC) Qualifier	0.00397 RL 50.0	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	09/12/22 09:55 Analyzed 09/09/22 10:25	
Analyte Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Ran Analyte Gasoline Range Organics	e Organics (DR) Result <50.0 ge Organics (DI) Result	O) (GC) Qualifier U RO) (GC) Qualifier U	0.00397 RL 50.0	mg/Kg Unit mg/Kg Unit	<u>D</u>	Prepared Prepared	09/12/22 09:55 Analyzed 09/09/22 10:25 Analyzed	Dil Fa

Welliou. 300.0 - Allions, Ion Chron	natograpny - St	Oluble					
Analyte	Result Q	Qualifier RI	. Unit	D	Prepared	Analyzed	Dil Fac
Chloride	238	5.00	mg/Kg			09/09/22 14:34	1

Limits

70 - 130

70 - 130

%Recovery Qualifier

99

93

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Dil Fac

Analyzed

09/09/22 00:23

09/09/22 00:23

Prepared

09/08/22 14:10

09/08/22 14:10

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2881-1

 Project/Site: PLU 21 BD 104H,123H,124H
 SDG: 03E1558048

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)	
390-2881-1	FS01	97	80	
390-2881-1 MS	FS01	118	102	
890-2881-1 MSD	FS01	138 S1+	104	
390-2881-2	FS02	110	92	
390-2881-3	FS03	107	86	
390-2881-4	FS04	109	91	
390-2881-5	FS05	112	92	
390-2881-6	FS08	106	87	
390-2881-7	FS09	122	84	
390-2881-8	FS10	113	93	
390-2881-9	FS11	108	89	
390-2881-10	FS12	116	92	
_CS 880-34162/1-A	Lab Control Sample	144 S1+	104	
_CSD 880-34162/2-A	Lab Control Sample Dup	141 S1+	106	
MB 880-34162/5-A	Method Blank	98	85	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (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)	
890-2881-1	FS01	120	112	
890-2881-1 MS	FS01	92	83	
890-2881-1 MSD	FS01	97	85	
890-2881-2	FS02	105	97	
890-2881-3	FS03	103	97	
890-2881-4	FS04	123	113	
890-2881-5	FS05	102	96	
890-2881-6	FS08	109	103	
890-2881-7	FS09	103	98	
890-2881-8	FS10	123	112	
890-2881-9	FS11	122	113	
890-2881-10	FS12	99	93	
LCS 880-34014/2-A	Lab Control Sample	147 S1+	131 S1+	
LCSD 880-34014/3-A	Lab Control Sample Dup	152 S1+	139 S1+	
MB 880-34014/1-A	Method Blank	107	103	

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OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2881-1 SDG: 03E1558048 Project/Site: PLU 21 BD 104H,123H,124H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34162/5-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34162

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 19:24	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/11/22 14:51	09/11/22 19:24	1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/11/22 14:51	09/11/22 19:24	1

Lab Sample ID: LCS 880-34162/1-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34162

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08208		mg/Kg		82	70 - 130	
Toluene	0.100	0.08061		mg/Kg		81	70 - 130	
Ethylbenzene	0.100	0.09744		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.2095		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.1203		mg/Kg		120	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-34162/2-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34162

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09196		mg/Kg		92	70 - 130	11	35	
Toluene	0.100	0.08758		mg/Kg		88	70 - 130	8	35	
Ethylbenzene	0.100	0.1057		mg/Kg		106	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.2270		mg/Kg		114	70 - 130	8	35	
o-Xylene	0.100	0.1293		mg/Kg		129	70 - 130	7	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-2881-1 MS

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 34162

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.08380		mg/Kg		83	70 - 130	
Toluene	<0.00199	U	0.101	0.08110		mg/Kg		80	70 - 130	

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QC Sample Results

 Client: Ensolum
 Job ID: 890-2881-1

 Project/Site: PLU 21 BD 104H,123H,124H
 SDG: 03E1558048

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

Lab Sample ID: 890-2881-1 MS Matrix: Solid

Analysis Batch: 34160

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 0.101 Ethylbenzene < 0.00199 U 0.08569 85 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 U 0.202 0.1788 mg/Kg 89 70 - 130 <0.00199 U 0.101 o-Xylene 0.1017 101 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery Qualifi	ier Limits
4-Bromofluorobenzene (Surr)	118	70 - 130
1,4-Difluorobenzene (Surr)	102	70 - 130

Lab Sample ID: 890-2881-1 MSD

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: FS01
Prep Type: Total/NA
Prep Batch: 34162

Sample Sample Spike MSD MSD RPD Result Qualifier Added Result Qualifier %Rec RPD Limit Analyte Unit Limits 0.100 Benzene <0.00199 U 0.08733 mg/Kg 87 70 - 130 4 35 0.08293 Toluene <0.00199 0.100 mg/Kg 83 70 - 130 2 35 Ethylbenzene <0.00199 U 0.100 0.1007 mg/Kg 100 70 - 130 16 35 0.201 0.2056 102 70 - 130 35 m-Xylene & p-Xylene <0.00398 U mg/Kg 14 <0.00199 U 0.100 0.1165 70 - 130 o-Xylene mg/Kg 116 14

MSD MSD

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

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

Lab Sample ID: MB 880-34014/1-A

Matrix: Solid

Analysis Batch: 33968

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 34014

Prep Batch: 34014

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130	09/08/22 14:1	09/08/22 19:23	1
o-Terphenyl	103		70 - 130	09/08/22 14:1	0 09/08/22 19:23	1

Lab Sample ID: LCS 880-34014/2-A

Matrix: Solid

Analysis Batch: 33968

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

Prep Batch: 34014

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics	1000	1026		mg/Kg		103	70 - 130
(GRO)-C6-C10							
Diesel Range Organics (Over	1000	992.0		mg/Kg		99	70 - 130
C10-C28)							

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<u>:</u>

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Prep Batch: 34014

Client: Ensolum Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

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

Lab Sample ID: LCS 880-34014/2-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 33968

	LCS			
Surrogate	%Recovery	Qualifier	Limits	
1-Chlorooctane	147	S1+	70 - 130	
o-Terphenyl	131	S1+	70 - 130	

Lab Sample ID: LCSD 880-34014/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 33968							Prep	Batch:	34014
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1032		mg/Kg		103	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1050		mg/Kg		105	70 - 130	6	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 152 S1+ 70 - 130 o-Terphenyl 139 S1+ 70 - 130

Lab Sample ID: 890-2881-1 MS **Client Sample ID: FS01** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 33968

Diesel Range Organics (Over

Prep Batch: 34014 Sample Sample Spike MS MS Result Qualifier Result Qualifier Analyte Added Unit %Rec Limits <50.0 U Gasoline Range Organics 999 829.5 mg/Kg 83 70 - 130 (GRO)-C6-C10

942.6

mg/Kg

92

70 - 130

999

C10-C28)

	MS MS				
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	92		70 - 130		
o-Terphenyl	83		70 - 130		

<50.0 U

Lab Sample ID: 890-2881-1 MSD **Client Sample ID: FS01**

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 33968** Prep Batch: 34014

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	996	841.1		mg/Kg		84	70 - 130	1	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U	996	978.1		mg/Kg		96	70 - 130	4	20
C10-C28)											

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

SDG: 03E1558048

Prep Type: Soluble

Dil Fac

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33840/1-A

Lab Sample ID: LCS 880-33840/2-A

Matrix: Solid

Matrix: Solid

Analyte

Chloride

Analyte

Chloride

Analysis Batch: 34020

Analysis Batch: 34020

мв мв

Result Qualifier <5.00 U

RL 5.00

Spike

Added

250

Unit mg/Kg

LCS LCS

Qualifier

Result

240.4

D

Analyzed

Prepared

09/09/22 12:06

Client Sample ID: FS01

Prep Type: Soluble

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

%Rec

Client Sample ID: Method Blank

Unit D %Rec Limits mg/Kg 96 90 - 110

Lab Sample ID: LCSD 880-33840/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34020

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit Limits **RPD** Limit Chloride 250 247.1 mg/Kg 90 - 110

Lab Sample ID: 890-2881-1 MS **Client Sample ID: FS01 Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34020

Spike MS MS %Rec Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 219 251 451.5 92 90 - 110 mg/Kg

Lab Sample ID: 890-2881-1 MSD

Matrix: Solid

Analyte Chloride

Analysis Batch: 34020

Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
219		251	451.4		mg/Kg		92	90 - 110	0	20

 Client: Ensolum
 Job ID: 890-2881-1

 Project/Site: PLU 21 BD 104H,123H,124H
 SDG: 03E1558048

GC VOA

Analysis Batch: 34160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	8021B	34162
890-2881-2	FS02	Total/NA	Solid	8021B	34162
890-2881-3	FS03	Total/NA	Solid	8021B	34162
890-2881-4	FS04	Total/NA	Solid	8021B	34162
890-2881-5	FS05	Total/NA	Solid	8021B	34162
890-2881-6	FS08	Total/NA	Solid	8021B	34162
890-2881-7	FS09	Total/NA	Solid	8021B	34162
890-2881-8	FS10	Total/NA	Solid	8021B	34162
890-2881-9	FS11	Total/NA	Solid	8021B	34162
890-2881-10	FS12	Total/NA	Solid	8021B	34162
MB 880-34162/5-A	Method Blank	Total/NA	Solid	8021B	34162
LCS 880-34162/1-A	Lab Control Sample	Total/NA	Solid	8021B	34162
LCSD 880-34162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34162
890-2881-1 MS	FS01	Total/NA	Solid	8021B	34162
890-2881-1 MSD	FS01	Total/NA	Solid	8021B	34162

Prep Batch: 34162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	5035	
890-2881-2	FS02	Total/NA	Solid	5035	
890-2881-3	FS03	Total/NA	Solid	5035	
890-2881-4	FS04	Total/NA	Solid	5035	
890-2881-5	FS05	Total/NA	Solid	5035	
890-2881-6	FS08	Total/NA	Solid	5035	
890-2881-7	FS09	Total/NA	Solid	5035	
890-2881-8	FS10	Total/NA	Solid	5035	
890-2881-9	FS11	Total/NA	Solid	5035	
890-2881-10	FS12	Total/NA	Solid	5035	
MB 880-34162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2881-1 MS	FS01	Total/NA	Solid	5035	
890-2881-1 MSD	FS01	Total/NA	Solid	5035	

Analysis Batch: 34244

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	Total BTEX	
890-2881-2	FS02	Total/NA	Solid	Total BTEX	
890-2881-3	FS03	Total/NA	Solid	Total BTEX	
890-2881-4	FS04	Total/NA	Solid	Total BTEX	
890-2881-5	FS05	Total/NA	Solid	Total BTEX	
890-2881-6	FS08	Total/NA	Solid	Total BTEX	
890-2881-7	FS09	Total/NA	Solid	Total BTEX	
890-2881-8	FS10	Total/NA	Solid	Total BTEX	
890-2881-9	FS11	Total/NA	Solid	Total BTEX	
890-2881-10	FS12	Total/NA	Solid	Total BTEX	

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Client: Ensolum Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H

SDG: 03E1558048

GC Semi VOA

Analysis Batch: 33968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	8015B NM	34014
890-2881-2	FS02	Total/NA	Solid	8015B NM	34014
890-2881-3	FS03	Total/NA	Solid	8015B NM	34014
890-2881-4	FS04	Total/NA	Solid	8015B NM	34014
890-2881-5	FS05	Total/NA	Solid	8015B NM	34014
890-2881-6	FS08	Total/NA	Solid	8015B NM	34014
890-2881-7	FS09	Total/NA	Solid	8015B NM	34014
890-2881-8	FS10	Total/NA	Solid	8015B NM	34014
890-2881-9	FS11	Total/NA	Solid	8015B NM	34014
890-2881-10	FS12	Total/NA	Solid	8015B NM	34014
MB 880-34014/1-A	Method Blank	Total/NA	Solid	8015B NM	34014
LCS 880-34014/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34014
LCSD 880-34014/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34014
890-2881-1 MS	FS01	Total/NA	Solid	8015B NM	34014
890-2881-1 MSD	FS01	Total/NA	Solid	8015B NM	34014

Prep Batch: 34014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	8015NM Prep	
890-2881-2	FS02	Total/NA	Solid	8015NM Prep	
890-2881-3	FS03	Total/NA	Solid	8015NM Prep	
890-2881-4	FS04	Total/NA	Solid	8015NM Prep	
890-2881-5	FS05	Total/NA	Solid	8015NM Prep	
890-2881-6	FS08	Total/NA	Solid	8015NM Prep	
890-2881-7	FS09	Total/NA	Solid	8015NM Prep	
890-2881-8	FS10	Total/NA	Solid	8015NM Prep	
890-2881-9	FS11	Total/NA	Solid	8015NM Prep	
890-2881-10	FS12	Total/NA	Solid	8015NM Prep	
MB 880-34014/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34014/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34014/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2881-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-2881-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34075

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Total/NA	Solid	8015 NM	
890-2881-2	FS02	Total/NA	Solid	8015 NM	
890-2881-3	FS03	Total/NA	Solid	8015 NM	
890-2881-4	FS04	Total/NA	Solid	8015 NM	
890-2881-5	FS05	Total/NA	Solid	8015 NM	
890-2881-6	FS08	Total/NA	Solid	8015 NM	
890-2881-7	FS09	Total/NA	Solid	8015 NM	
890-2881-8	FS10	Total/NA	Solid	8015 NM	
890-2881-9	FS11	Total/NA	Solid	8015 NM	
890-2881-10	FS12	Total/NA	Solid	8015 NM	

Client: Ensolum Job ID: 890-2881-1 Project/Site: PLU 21 BD 104H,123H,124H SDG: 03E1558048

HPLC/IC

Leach Batch: 33840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-2881-1	FS01	Soluble	Solid	DI Leach	
890-2881-2	FS02	Soluble	Solid	DI Leach	
890-2881-3	FS03	Soluble	Solid	DI Leach	
890-2881-4	FS04	Soluble	Solid	DI Leach	
890-2881-5	FS05	Soluble	Solid	DI Leach	
890-2881-6	FS08	Soluble	Solid	DI Leach	
890-2881-7	FS09	Soluble	Solid	DI Leach	
890-2881-8	FS10	Soluble	Solid	DI Leach	
890-2881-9	FS11	Soluble	Solid	DI Leach	
890-2881-10	FS12	Soluble	Solid	DI Leach	
MB 880-33840/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33840/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33840/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2881-1 MS	FS01	Soluble	Solid	DI Leach	
890-2881-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 34020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2881-1	FS01	Soluble	Solid	300.0	33840
890-2881-2	FS02	Soluble	Solid	300.0	33840
890-2881-3	FS03	Soluble	Solid	300.0	33840
890-2881-4	FS04	Soluble	Solid	300.0	33840
890-2881-5	FS05	Soluble	Solid	300.0	33840
890-2881-6	FS08	Soluble	Solid	300.0	33840
890-2881-7	FS09	Soluble	Solid	300.0	33840
890-2881-8	FS10	Soluble	Solid	300.0	33840
890-2881-9	FS11	Soluble	Solid	300.0	33840
890-2881-10	FS12	Soluble	Solid	300.0	33840
MB 880-33840/1-A	Method Blank	Soluble	Solid	300.0	33840
LCS 880-33840/2-A	Lab Control Sample	Soluble	Solid	300.0	33840
LCSD 880-33840/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33840
890-2881-1 MS	FS01	Soluble	Solid	300.0	33840
890-2881-1 MSD	FS01	Soluble	Solid	300.0	33840

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1

SDG: 03E1558048

Client Sample ID: FS01

Date Collected: 09/01/22 12:30 Date Received: 09/02/22 14:56

Lab Sample ID: 890-2881-1

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			5.02 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 19:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 20:27	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 12:34	CH	EET MID

Client Sample ID: FS02 Lab Sample ID: 890-2881-2

Date Collected: 09/01/22 12:35

Matrix: Solid

Date Received: 09/02/22 14:56

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.04 g 5 mL 34162 09/11/22 14:51 EL EET MID Total/NA 8021B 09/11/22 20:06 **EET MID** Analysis 1 5 mL 5 mL 34160 MR Total/NA Total BTEX 34244 09/12/22 09:55 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 34075 09/09/22 10:25 SM **EET MID** Total/NA 34014 Prep 8015NM Prep 10.03 g 10 mL 09/08/22 14:10 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 33968 09/08/22 21:31 SM **EET MID** Soluble 09/06/22 12:41 KS Leach DI Leach 5.03 g 50 mL 33840 EET MID Soluble Analysis 300.0 50 mL 50 mL 34020 09/09/22 13:02 СН **EET MID**

Client Sample ID: FS03

Date Collected: 09/01/22 12:40 Date Received: 09/02/22 14:56

Lab Sample ID: 890-2881-3

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			4.98 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 20:27	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 21:53	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 13:11	CH	EET MID

Client Sample ID: FS04

Date Collected: 09/01/22 12:45

Date Received: 09/02/22 14:56

Lab Sample ID: 890-2881-4

Matrix: Solid

	5	5.4.1		5 "		-	5			
	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	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 20:47	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1 SDG: 03E1558048

Client Sample ID: FS04

Date Collected: 09/01/22 12:45 Date Received: 09/02/22 14:56 Lab Sample ID: 890-2881-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 22:14	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 13:20	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-2881-5

Date Collected: 09/01/22 12:50

Date Received: 09/02/22 14:56

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			5.03 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 21:08	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 22:36	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 13:29	CH	EET MID

Client Sample ID: FS08 Lab Sample ID: 890-2881-6

Date Collected: 09/01/22 13:05 Date Received: 09/02/22 14:56

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			4.97 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 21:28	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 22:57	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 13:57	CH	EET MID

Lab Sample ID: 890-2881-7 **Client Sample ID: FS09**

Date Collected: 09/01/22 13:10 Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 21:49	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 23:18	SM	EET MID

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Matrix: Solid

 Client: Ensolum
 Job ID: 890-2881-1

 Project/Site: PLU 21 BD 104H,123H,124H
 SDG: 03E1558048

Client Sample ID: FS09

Lab Sample ID: 890-2881-7

Date Collected: 09/01/22 13:10
Date Received: 09/02/22 14:56
Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble DI Leach 33840 Leach 5.02 g 50 mL 09/06/22 12:41 KS EET MID 300.0 Soluble Analysis 1 50 mL 50 mL 34020 09/09/22 14:06 СН **EET MID**

Client Sample ID: FS10 Lab Sample ID: 890-2881-8

Date Collected: 09/01/22 13:15 Matrix: Solid

Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.98 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 22:09	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/08/22 23:40	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 14:15	CH	EET MID

Client Sample ID: FS11 Lab Sample ID: 890-2881-9

Date Collected: 09/01/22 13:20 Matrix: Solid
Date Received: 09/02/22 14:56

	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	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 22:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 00:02	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 14:25	CH	EET MID

Client Sample ID: FS12 Lab Sample ID: 890-2881-10

Date Collected: 09/01/22 13:25 Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/11/22 22:50	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34244	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34075	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 00:23	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 14:34	CH	EET MID

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Matrix: Solid

Lab Chronicle

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H,124H

Laboratory References:

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

Job ID: 890-2881-1 SDG: 03E1558048

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2881-1

 Project/Site: PLU 21 BD 104H,123H,124H
 SDG: 03E1558048

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 englytes	and the street and the state of a contract that			
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	t the laboratory is not certifi Matrix	ed by the governing authority. This list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H,123H,124H

Job ID: 890-2881-1

SDG: 03E1558048

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 21 BD 104H,123H,124H

Job ID: 890-2881-1

SDG: 03E1558048

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2881-1	FS01	Solid	09/01/22 12:30	09/02/22 14:56	2'
890-2881-2	FS02	Solid	09/01/22 12:35	09/02/22 14:56	2'
890-2881-3	FS03	Solid	09/01/22 12:40	09/02/22 14:56	2'
890-2881-4	FS04	Solid	09/01/22 12:45	09/02/22 14:56	2'
890-2881-5	FS05	Solid	09/01/22 12:50	09/02/22 14:56	2'
890-2881-6	FS08	Solid	09/01/22 13:05	09/02/22 14:56	2'
890-2881-7	FS09	Solid	09/01/22 13:10	09/02/22 14:56	2'
890-2881-8	FS10	Solid	09/01/22 13:15	09/02/22 14:56	2'
890-2881-9	FS11	Solid	09/01/22 13:20	09/02/22 14:56	2'
890-2881-10	FS12	Solid	09/01/22 13:25	09/02/22 14:56	2'

eurofins

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

EST Preservative Codes
eliverables: EDD
eporting: Level II ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV☐
tate of Project:
rogram: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
Work Order Comments
www.xenco.com Page / of /
Work Order No:

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		2	145G2	7	9/2/22	0	tot	das	188	Y	haplacean	10
Date/Time	Received by: (Signature)	Relinquished by: (Signature)		Date/Time	Dat		иге)	Received by: (Signature)	Received		Refinguished by: (Signature)	Re
	nors. It assigns standard terms and conditions are due to circumstances beyond the control arms will be enforced unless previously negotiated.	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.	rofins Xen kpenses in Eurofins X	any to Eusses or ex nitted to E	ient compu for any lou mple subn	er from cli onsibility r each sa	urchase ordi me any resp arge of \$5 fo	titutes a valid point of the state of the st	of samples cons it of samples an applied to each	ishment or or the cos 10 will be a	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontrac 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 loss of Eurofins Xenco, a minimum charge of \$85.00 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These to	votice: of servic of Eurofi
4/0 / /4/1	g TI U Hg: 1631 / 245.1 / /4/0 / /4/1	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	Be Co	As Ba	A Sb	8RCF	PLP 6010	TCLP / SF	zed	analyz	Circle Method(s) and Metal(s) to be analyzed	Circle
3n U ∨ Zn	Mo Ni K Se Ag SiO ₂ Na Sr Ti S	8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Ti Sn U V Zn	Be B	As Ba	Al Sb /	3S 11 ,	PM Texa	RCRA 13P	81)20:	Total 200.7 / 6010 200.8 / 6020:	Tot
			×	×	×	_	Ŋ	13:25	9/1/2022	s	FS12	
			×	×	×	-	2	13:20	9/1/2022	S	FS11	
			×	×	×	+	2	13.15	9/1/2022	S	FS10	
			×	×	×	-	2	13:10	9/1/2022	s	FS09	
1666401001			×	×	×		2	13:05	9/1/2022	S	FS08	
	CC:		×	×	×	_	2	12:50	9/1/2022	S	FS05	
1151438	nAPP2211151438		×	×	×		2	12:45	9/1/2022	S	FS04	
1651017	nAPP2211651017		×	×	×		2	12:40	9/1/2022	S	FS03	

NaOH+Ascorbic Acid: SAPC

Sample Comments

Zn Acetate+NaOH: Zn

nAPP2209736479 Incident ID: Na₂S₂O₃: NaSO₃ NaHSO₄: NABIS H3PO4: HP

SAMPLE RECEIPT

No No

Wet ice:

(es) No

Parameters

the lab, if received by 4:30pm TAT starts the day received by

Samples Received Intact:

Cooler Custody Seals:

imple Custody Seals:

Yes No (N/A Yes No Yes No

Temperature Reading: Correction Factor: Thermometer ID:

CHLORIDES (EPA: 300.0)

Corrected Temperature:

No.

Sample Identification

Matrix

Sampled

Sampled

Date

Time

Depth

Comp Grab/

Cont

TPH (8015)

BTEX (8021

890-2881 Chain of Custody

FS02 FS01

S ഗ

9/1/2022 9/1/2022

12:35 12:30

> Ŋ N

Sampler's Name:

roject Location:

32.10934, -103.88918

Due Date:

✓ Routine

Rush

Turn Around

ANALYSIS REQU

HCL: HC H₂SO₄: H₂

Cool: Coo None: NO

MeOH: Me HNO₃: HN NaOH: Na

DI Water: H₂O

Kase Parker

Project Number:

roject Name:

PLU 21 BD 104H, 123H, 124H

03E1558048

Company Name: Project Manager:

Ensolum

Ben Belill

City, State ZIP:

303-887-2946 Carlsbad, NM 88220

Email:

Garret.Green@ExxonMobil.com

City, State ZIP: Address: Company Name: Bill to: (if different)

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

ddress:

3122 National Parks Hwy

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2881-1

SDG Number: 03E1558048

Login Number: 2881 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	N/A	

3

4

6

8

10

12

13

14

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2881-1 SDG Number: 03E1558048

> **List Source: Eurofins Midland** List Creation: 09/07/22 11:42 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2881

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	

Released to Imaging: 12/13/2022 2:43:30 PM

<6mm (1/4").





ANALYTICAL REPORT

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

Laboratory Job ID: 890-2882-1

Laboratory Sample Delivery Group: 03E1558048 Client Project/Site: PLU 21 BD 104H, 123H, 124H

Revision: 1

For:

eurofins 🔅

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMPR

Authorized for release by: 9/14/2022 5:58:55 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Have a Question?

..... LINKS

EOL

Review your project results through

Received by OCD: 9/21/2022 3:08:06 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 12/13/2022 2:43:30 PM

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 21 BD 104H, 123H, 124H

Laboratory Job ID: 890-2882-1 SDG: 03E1558048

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Definitions/Glossary

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558048

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

GC Semi VOA

Qualifier **Qualifier Description**

S1+ Surrogate recovery exceeds control limits, high biased. 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** Contains No Free Liquid CNF

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 MI Minimum 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

Practical Quantitation Limit PQL

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

RPD Relative Percent Difference, a measure of the relative difference between two points

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Job ID: 890-2882-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2882-1

REVISION

The report being provided is a revision of the original report sent on 9/14/2022. The report (revision 1) is being revised due to Pe client email, requesting sample depths to be corrected.

Report revision history

Receipt

The samples were received on 9/2/2022 2:56 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-34162/1-A), (LCSD 880-34162/2-A) and (890-2881-A-1-H MSD). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34272 and analytical batch 880-34340 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 sample was outside control limits: (LCSD 880-34272/2-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: (LCS 880-34014/2-A) and (LCSD 880-34014/3-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.

HPLC/IC

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

Client Sample ID: SW01 Lab Sample ID: 890-2882-1

Date Collected: 09/02/22 11:20 **Matrix: Solid** Date Received: 09/02/22 14:56

Sample Depth: 0 - 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
m-Xylene & p-Xylene	< 0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/11/22 14:51	09/12/22 00:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			09/11/22 14:51	09/12/22 00:12	1
1,4-Difluorobenzene (Surr)	86		70 - 130			09/11/22 14:51	09/12/22 00:12	1
Method: Total BTEX - Total B	TEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			09/12/22 09:55	1
Method: 8015 NM - Diesel Rai	ngo Organic	e (DPO) (G	2C)					
		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total TPH		Qualifier	•	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/09/22 10:25	
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel R	Result <49.9	Qualifier U	RL 49.9	mg/Kg			09/09/22 10:25	1
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics	Result <49.9	Qualifier U ics (DRO) Qualifier	RL 49.9		<u>D</u>	Prepared 09/08/22 14:10	09/09/22 10:25 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ange Organ Result	Qualifier U ics (DRO) Qualifier U	RL 49.9 (GC)	mg/Kg		Prepared	09/09/22 10:25 Analyzed 09/09/22 01:06	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 ange Organ Result <49.9	Qualifier U ics (DRO) Qualifier U	(GC) RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10	09/09/22 10:25 Analyzed 09/09/22 01:06	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U ics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10	09/09/22 10:25 Analyzed 09/09/22 01:06 09/09/22 01:06	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9 ange Organ Result <49.9 <49.9 <49.9	Qualifier U ics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10	09/09/22 10:25 Analyzed 09/09/22 01:06 09/09/22 01:06 09/09/22 01:06 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U ics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10 Prepared 09/08/22 14:10	09/09/22 10:25 Analyzed 09/09/22 01:06 09/09/22 01:06 09/09/22 01:06 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel R Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U CS (DRO) Qualifier U U 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 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10 Prepared 09/08/22 14:10	Analyzed 09/09/22 01:06 09/09/22 01:06 09/09/22 01:06 Analyzed 09/09/22 01:06	Dil Face 1 1 1 1 Dil Face 1
Analyte Total TPH Method: 8015B NM - Diesel R 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 U CS (DRO) Qualifier U U 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 09/08/22 14:10 09/08/22 14:10 09/08/22 14:10 Prepared 09/08/22 14:10	Analyzed 09/09/22 01:06 09/09/22 01:06 09/09/22 01:06 Analyzed 09/09/22 01:06	Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac 1 Dil Fac

Client Sample ID: SW02 Lab Sample ID: 890-2882-2 Date Collected: 09/02/22 11:30 **Matrix: Solid**

Date Received: 09/02/22 14:56

Sample Depth: 0 - 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/11/22 14:51	09/12/22 00:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/11/22 14:51	09/12/22 00:33	1

Client Sample ID: SW02 Lab Sample ID: 890-2882-2

Date Collected: 09/02/22 11:30 **Matrix: Solid** Date Received: 09/02/22 14:56

Sample Depth: 0 - 2'

Method: 8021B - Volatile Orga	nic Compounds (GC) (Con	tinued)			
Surrogate	%Recovery Qualifier Lin	nits	Prepared	Analyzed	Dil Fac

79 1,4-Difluorobenzene (Surr) 70 - 130 09/11/22 14:51 09/12/22 00:33

Method: Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac

Total BTEX <0.00398 U 0.00398 mg/Kg 09/12/22 09:55

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Unit D Prepared Analyzed Dil Fac Total TPH <49.9 U 49.9 mg/Kg 09/09/22 10:25

Method: 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier RL Unit D **Analyte** Prepared Analyzed Dil Fac Gasoline Range Organics <49.9 U 49.9 09/08/22 14:10 09/09/22 01:28 mg/Kg (GRO)-C6-C10

09/08/22 14:10 09/09/22 01:28 Diesel Range Organics (Over <49.9 U 49.9 mg/Kg C10-C28) mg/Kg Oll Range Organics (Over C28-C36) <49.9 U 49.9 09/08/22 14:10 09/09/22 01:28

%Recovery Qualifier Dil Fac Surrogate Limits Prepared Analyzed 70 - 130 09/08/22 14:10 09/09/22 01:28 1-Chlorooctane 114 o-Terphenyl 105 70 - 130 09/08/22 14:10 09/09/22 01:28

Method: 300.0 - Anions, Ion Chromatography - Soluble Result Qualifier Unit Analyte RL Prepared Analyzed Dil Fac Chloride 533 5.01 mg/Kg 09/09/22 15:11

Client Sample ID: SW03 Lab Sample ID: 890-2882-3 Matrix: Solid

Date Collected: 09/02/22 11:40 Date Received: 09/02/22 14:56

Sample Depth: 0 - 3'

Method: 8021B - Volatile	e Organic Compoւ	ınds (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/12/22 10:28	09/14/22 04:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130	09/12/22 10:28 09/14/22 04:3	3 1
1,4-Difluorobenzene (Surr)	82		70 - 130	09/12/22 10:28 09/14/22 04:3	3 1

Method: Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Total BTEX <0.00403 U 0.00403 mg/Kg 09/12/22 09:55

Method: 8015 NM - Diesel Ran	ge Organic	s (DRO) (G	C)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 10:25	1

Da Date Received: 09/02/22 14:56

Sample Depth: 0 - 3'

Blient Sample ID: SW03	Lab Sample ID: 890-2882-3
ate Collected: 09/02/22 11:40	Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/09/22 01:49	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/09/22 01:49	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/09/22 01:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	101		70 - 130			09/08/22 14:10	09/09/22 01:49	1
o-Terphenyl	96		70 - 130			09/08/22 14:10	09/09/22 01:49	1
_ Method: 300.0 - Anions, Ion C	hromatogra	ıphv - Solu	ıble					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

4.98 Client Sample ID: SW04 Lab Sample ID: 890-2882-4

210

mg/Kg

Date Collected: 09/02/22 11:50 Date Received: 09/02/22 14:56

Sample Depth: 0 - 2'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
Ethylbenzene	< 0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
m-Xylene & p-Xylene	< 0.00399	U	0.00399	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
o-Xylene	< 0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/12/22 10:28	09/14/22 04:59	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	125		70 - 130			09/12/22 10:28	09/14/22 04:59	1
1,4-Difluorobenzene (Surr)	89		70 - 130			09/12/22 10:28	09/14/22 04:59	1
Method: Total BTEX - Total B	ΓEX Calcula	tion						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/12/22 09:55	1
Method: 8015 NM - Diesel Rar	nge Organic	s (DRO) (0	GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 10:25	1
Method: 8015B NM - Diesel R	ange Organ	ics (DRO)	(GC)					
Analyte	_	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 02:11	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 02:11	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 14:10	09/09/22 02:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130			09/08/22 14:10	09/09/22 02:11	1

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09/09/22 15:20

Matrix: Solid

Client Sample Results

 Client: Ensolum
 Job ID: 890-2882-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Client Sample ID: SW04 Lab Sample ID: 890-2882-4

Date Collected: 09/02/22 11:50

Matrix: Solid

Date Received: 09/02/22 14:56 Sample Depth: 0 - 2'

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Chloride	119	5.03	mg/Kg			09/09/22 18:19	1		

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Surrogate Summary

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-			Per	cent Surrogate Red
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-18879-A-101-F MS	Matrix Spike	123	105	
880-18879-A-101-G MSD	Matrix Spike Duplicate	127	105	
890-2881-A-1-G MS	Matrix Spike	118	102	
890-2881-A-1-H MSD	Matrix Spike Duplicate	138 S1+	104	
890-2882-1	SW01	109	86	
890-2882-2	SW02	110	79	
890-2882-3	SW03	112	82	
890-2882-4	SW04	125	89	
LCS 880-34162/1-A	Lab Control Sample	144 S1+	104	
LCS 880-34272/1-A	Lab Control Sample	127	98	
LCSD 880-34162/2-A	Lab Control Sample Dup	141 S1+	106	
LCSD 880-34272/2-A	Lab Control Sample Dup	67 S1-	99	
MB 880-34162/5-A	Method Blank	98	85	
MB 880-34272/5-A	Method Blank	98	85	
MB 880-34351/5-A	Method Blank	99	90	
O				
Surrogate Legend	(0)			
BFB = 4-Bromofluorobei	, ,			
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)					
890-2881-A-1-E MS	Matrix Spike	92	83					
890-2881-A-1-F MSD	Matrix Spike Duplicate	97	85					
890-2882-1	SW01	119	110					
890-2882-2	SW02	114	105					
890-2882-3	SW03	101	96					
890-2882-4	SW04	99	93					
LCS 880-34014/2-A	Lab Control Sample	147 S1+	131 S1+					
LCSD 880-34014/3-A	Lab Control Sample Dup	152 S1+	139 S1+					
MB 880-34014/1-A	Method Blank	107	103					

1CO = 1-Chlorooctane

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OTPH = o-Terphenyl

Job ID: 890-2882-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34162/5-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34162

•							•	
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	•
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 19:24	
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/11/22 14:51	09/11/22 19:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/11/22 14:51	09/11/22 19:24	
-								

MB MB

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98	70 - 130	09/11/22 14:51	09/11/22 19:24	1
1,4-Difluorobenzene (Surr)	85	70 - 130	09/11/22 14:51	09/11/22 19:24	1

Lab Sample ID: LCS 880-34162/1-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34162

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08208		mg/Kg		82	70 - 130	
Toluene	0.100	0.08061		mg/Kg		81	70 - 130	
Ethylbenzene	0.100	0.09744		mg/Kg		97	70 - 130	
m-Xylene & p-Xylene	0.200	0.2095		mg/Kg		105	70 - 130	
o-Xylene	0.100	0.1203		mg/Kg		120	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	144	S1+	70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-34162/2-A

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34162

%Rec

Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09196		mg/Kg		92	70 - 130	11	35
Toluene	0.100	0.08758		mg/Kg		88	70 - 130	8	35
Ethylbenzene	0.100	0.1057		mg/Kg		106	70 - 130	8	35
m-Xylene & p-Xylene	0.200	0.2270		mg/Kg		114	70 - 130	8	35
o-Xylene	0.100	0.1293		mg/Kg		129	70 - 130	7	35

Spike

LCSD LCSD

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	141	S1+	70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-2881-A-1-G MS

Matrix: Solid

Analysis Batch: 34160

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

Prep Batch: 34162

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.08380		mg/Kg		83	70 - 130	
Toluene	<0.00199	U	0.101	0.08110		mg/Kg		80	70 - 130	

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QC Sample Results

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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

Lab Sample ID: 890-2881-A-1-G MS

Lab Sample ID: 890-2881-A-1-H MSD

Matrix: Solid

Analysis Batch: 34160

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Prep Batch: 34162

Spike MS MS %Rec Sample Sample Result Qualifier Added Result Qualifier Unit D %Rec Limits Ethylbenzene <0.00199 U 0.101 0.08569 mg/Kg 85 70 - 130 m-Xylene & p-Xylene <0.00398 U 0.202 0.1788 mg/Kg 89 70 - 130 o-Xylene <0.00199 U 0.101 0.1017 mg/Kg 101 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	118		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34162

Matrix: Solid

Analysis Batch: 34160

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_	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.100	0.08733		mg/Kg		87	70 - 130	4	35
Toluene	< 0.00199	U	0.100	0.08293		mg/Kg		83	70 - 130	2	35
Ethylbenzene	<0.00199	U	0.100	0.1007		mg/Kg		100	70 - 130	16	35
m-Xylene & p-Xylene	<0.00398	U	0.201	0.2056		mg/Kg		102	70 - 130	14	35
o-Xvlene	< 0.00199	U	0.100	0 1165		ma/Ka		116	70 - 130	14	35

MSD MSD

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

Lab Sample ID: MB 880-34272/5-A

Matrix: Solid

Analysis Batch: 34340

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

Prep Batch: 34272

Analyte	Result (Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Toluene	<0.00200 l	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
m-Xylene & p-Xylene	<0.00400 \	U	0.00400	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Xylenes, Total	<0.00400 U	U	0.00400	mg/Kg		09/12/22 10:28	09/13/22 21:47	1

MB MB

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared Analyz	zed Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12/22 10:28 09/13/22	21:47 1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/12/22 10:28 09/13/22	21:47 1

Lab Sample ID: LCS 880-34272/1-A

Released to Imaging: 12/13/2022 2:43:30 PM

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Lab Control Sample Prep Type: Total/NA Prep Batch: 34272

•	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08116		mg/Kg		81	70 - 130	
Toluene	0.100	0.08046		mg/Kg		80	70 - 130	
Ethylbenzene	0.100	0.09042		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1950		mg/Kg		97	70 - 130	

Project/Site: PLU 21 BD 104H, 123H, 124H

Client: Ensolum

Job ID: 890-2882-1

SDG: 03E1558048

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

Lab Sample ID: LCS 880-34272/1-A **Client Sample ID: Lab Control Sample Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 34340** Prep Batch: 34272 LCS LCS Spike %Rec

Analyte Added Result Qualifier Unit %Rec Limits o-Xylene 0 100 0 1131 mg/Kg 113 70 - 130

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 127 70 - 130 1,4-Difluorobenzene (Surr) 98 70 - 130

Lab Sample ID: LCSD 880-34272/2-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 34340

Prep Batch: 34272 LCSD LCSD Spike %Rec **RPD** Added Result Qualifier Limits **RPD** Limit Analyte Unit %Rec Benzene 0.100 0.07578 mg/Kg 76 70 - 130 35 Toluene 0.100 0.08052 mg/Kg 81 70 - 130 0 35 Ethylbenzene 0.100 mg/Kg 93 70 - 130 35 0.09275 3 m-Xylene & p-Xylene 0.200 0.2014 101 70 - 130 35 mg/Kg o-Xylene 0.100 0.1170 mg/Kg 117 70 - 130 35

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 67 S1-70 - 130 1,4-Difluorobenzene (Surr) 99 70 - 130

Lab Sample ID: 880-18879-A-101-F MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 34340									Prep Batch: 34	272
_	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.101	0.05794	F1	mg/Kg		57	70 - 130	
Toluene	<0.00201	U F1	0.101	0.05604	F1	mg/Kg		55	70 - 130	
Ethylbenzene	< 0.00201	U F1	0.101	0.06113	F1	mg/Kg		61	70 - 130	
m-Xylene & p-Xylene	<0.00402	U F1	0.202	0.1247	F1	mg/Kg		62	70 - 130	
o-Xylene	< 0.00201	U	0.101	0.07156		mg/Kg		71	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 123 1,4-Difluorobenzene (Surr) 105 70 - 130

Lab Sample ID: 880-18879-A-101-G MSD **Client Sample ID: Matrix Spike Duplicate**

Matrix: Solid

Analysis Batch: 34340									Prep B	atch: 3	34272
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U F1	0.0994	0.05214	F1	mg/Kg		52	70 - 130	11	35
Toluene	<0.00201	U F1	0.0994	0.05106	F1	mg/Kg		51	70 - 130	9	35
Ethylbenzene	<0.00201	U F1	0.0994	0.05988	F1	mg/Kg		60	70 - 130	2	35
m-Xylene & p-Xylene	<0.00402	U F1	0.199	0.1209	F1	mg/Kg		61	70 - 130	3	35
o-Xylene	<0.00201	U	0.0994	0.06976		mg/Kg		70	70 - 130	3	35

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Prep Type: Total/NA

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

Lab Sample ID: 880-18879-A-101-G MSD

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34272

MSD MSD %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 127 70 - 130 1,4-Difluorobenzene (Surr) 105 70 - 130

Client Sample ID: Method Blank Lab Sample ID: MB 880-34351/5-A

Matrix: Solid

Analysis Batch: 34340

Prep Type: Total/NA

Prep Batch: 34351

MB MB Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 Toluene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 Ethylbenzene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 09/13/22 09:09 09/13/22 11:13 o-Xylene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 Xylenes, Total <0.00400 U 0.00400 09/13/22 09:09 09/13/22 11:13 mg/Kg

MB MB

MB MB

Surrogate	%Recovery Qualifi	ier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99	70 - 130	09/13/22 09:09	09/13/22 11:13	1
1,4-Difluorobenzene (Surr)	90	70 - 130	09/13/22 09:09	09/13/22 11:13	1

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

Lab Sample ID: MB 880-34014/1-A

Matrix: Solid

Analysis Batch: 33968

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

Prep Batch: 34014

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 14:10	09/08/22 19:23	1
	MR	MR						

	мв мв				
Surrogate	%Recovery Quali	lifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	107	70 - 130	09/08/22 14:10	09/08/22 19:23	1
o-Terphenyl	103	70 - 130	09/08/22 14:10	09/08/22 19:23	1

Lab Sample ID: LCS 880-34014/2-A

Released to Imaging: 12/13/2022 2:43:30 PM

Matrix: Solid

Analysis Batch: 33968

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

Prep Batch: 34014

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1026		mg/Kg		103	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	992.0		mg/Kg		99	70 - 130	
C10-C28)								

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	147	S1+	70 - 130
o-Terphenyl	131	S1+	70 - 130

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

Lab Sample ID: LCSD 880-34014/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 33968 Prep Batch: 34014

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1032		mg/Kg		103	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1050		mg/Kg		105	70 - 130	6	20
C10 C28)									

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 152 S1+ 70 - 130 1-Chlorooctane 70 - 130 o-Terphenyl 139 S1+

Lab Sample ID: 890-2881-A-1-E MS **Client Sample ID: Matrix Spike**

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 33968 Prep Batch: 34014

	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	999	829.5		mg/Kg		83	70 - 130	
Diesel Range Organics (Over C10-C28)	<50.0	U	999	942.6		mg/Kg		92	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 92 70 - 130 o-Terphenyl 83 70 - 130

Lab Sample ID: 890-2881-A-1-F MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 33968									Prep E	Satch: 3	34014
	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	996	841.1		mg/Kg		84	70 - 130	1	20
Diesel Range Organics (Over C10-C28)	<50.0	U	996	978.1		mg/Kg		96	70 - 130	4	20

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

MSD MSD

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33840/1-A **Client Sample ID: Method Blank Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34020

	MB M	/IB						
Analyte	Result Q	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00 U	J	5.00	mg/Kg			09/09/22 12:06	1

QC Sample Results

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 880-33840/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34020

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit Limits D %Rec Chloride 250 240.4 mg/Kg 96 90 - 110

Lab Sample ID: LCSD 880-33840/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 34020

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit

250

Lab Sample ID: 890-2882-1 MS Client Sample ID: SW01 **Prep Type: Soluble**

247.1

mg/Kg

Matrix: Solid

Chloride

Analysis Batch: 34020

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Limits Unit %Rec Chloride 390 251 623.1 mg/Kg

Lab Sample ID: 890-2882-1 MSD

Matrix: Solid

Analysis Batch: 34020

Spike MSD MSD %Rec **RPD** Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 390 251 620.0 mg/Kg 91 90 - 110

Eurofins Carlsbad

90 - 110

Client Sample ID: SW01

Prep Type: Soluble

99

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC VOA

Analysis Batch: 34160

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Total/NA	Solid	8021B	34162
890-2882-2	SW02	Total/NA	Solid	8021B	34162
MB 880-34162/5-A	Method Blank	Total/NA	Solid	8021B	34162
LCS 880-34162/1-A	Lab Control Sample	Total/NA	Solid	8021B	34162
LCSD 880-34162/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34162
890-2881-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	34162
890-2881-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34162

Prep Batch: 34162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Total/NA	Solid	5035	
890-2882-2	SW02	Total/NA	Solid	5035	
MB 880-34162/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34162/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34162/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2881-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2881-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Total/NA	Solid	Total BTEX	
890-2882-2	SW02	Total/NA	Solid	Total BTEX	
890-2882-3	SW03	Total/NA	Solid	Total BTEX	
890-2882-4	SW04	Total/NA	Solid	Total BTEX	

Prep Batch: 34272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-3	SW03	Total/NA	Solid	5035	
890-2882-4	SW04	Total/NA	Solid	5035	
MB 880-34272/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34272/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34272/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18879-A-101-F MS	Matrix Spike	Total/NA	Solid	5035	
880-18879-A-101-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-3	SW03	Total/NA	Solid	8021B	34272
890-2882-4	SW04	Total/NA	Solid	8021B	34272
MB 880-34272/5-A	Method Blank	Total/NA	Solid	8021B	34272
MB 880-34351/5-A	Method Blank	Total/NA	Solid	8021B	34351
LCS 880-34272/1-A	Lab Control Sample	Total/NA	Solid	8021B	34272
LCSD 880-34272/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34272
880-18879-A-101-F MS	Matrix Spike	Total/NA	Solid	8021B	34272
880-18879-A-101-G MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34272

Prep Batch: 34351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34351/5-A	Method Blank	Total/NA	Solid	5035	

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC Semi VOA

Analysis Batch: 33968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Total/NA	Solid	8015B NM	34014
890-2882-2	SW02	Total/NA	Solid	8015B NM	34014
890-2882-3	SW03	Total/NA	Solid	8015B NM	34014
890-2882-4	SW04	Total/NA	Solid	8015B NM	34014
MB 880-34014/1-A	Method Blank	Total/NA	Solid	8015B NM	34014
LCS 880-34014/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34014
LCSD 880-34014/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34014
890-2881-A-1-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34014
890-2881-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34014

Prep Batch: 34014

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Total/NA	Solid	8015NM Prep	
890-2882-2	SW02	Total/NA	Solid	8015NM Prep	
890-2882-3	SW03	Total/NA	Solid	8015NM Prep	
890-2882-4	SW04	Total/NA	Solid	8015NM Prep	
MB 880-34014/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34014/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34014/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2881-A-1-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2881-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34076

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-2882-1	SW01	Total/NA	Solid	8015 NM
890-2882-2	SW02	Total/NA	Solid	8015 NM
890-2882-3	SW03	Total/NA	Solid	8015 NM
890-2882-4	SW04	Total/NA	Solid	8015 NM

HPLC/IC

Leach Batch: 33840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Soluble	Solid	DI Leach	
890-2882-2	SW02	Soluble	Solid	DI Leach	
890-2882-3	SW03	Soluble	Solid	DI Leach	
890-2882-4	SW04	Soluble	Solid	DI Leach	
MB 880-33840/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33840/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33840/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2882-1 MS	SW01	Soluble	Solid	DI Leach	
890-2882-1 MSD	SW01	Soluble	Solid	DI Leach	

Analysis Batch: 34020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2882-1	SW01	Soluble	Solid	300.0	33840
890-2882-2	SW02	Soluble	Solid	300.0	33840
890-2882-3	SW03	Soluble	Solid	300.0	33840
890-2882-4	SW04	Soluble	Solid	300.0	33840
MB 880-33840/1-A	Method Blank	Soluble	Solid	300.0	33840
LCS 880-33840/2-A	Lab Control Sample	Soluble	Solid	300.0	33840

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

HPLC/IC (Continued)

Analysis Batch: 34020 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-33840/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33840
890-2882-1 MS	SW01	Soluble	Solid	300.0	33840
890-2882-1 MSD	SW01	Soluble	Solid	300.0	33840

SDG: 03E1558048

Project/Site: PLU 21 BD 104H, 123H, 124H

Lab Sample ID: 890-2882-1

Matrix: Solid

Client Sample ID: SW01 Date Collected: 09/02/22 11:20

Date Received: 09/02/22 14:56

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/12/22 00:12	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34245	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34076	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 01:06	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 14:43	CH	EET MID

Client Sample ID: SW02 Lab Sample ID: 890-2882-2 Date Collected: 09/02/22 11:30 **Matrix: Solid**

Date Received: 09/02/22 14:56

	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	34162	09/11/22 14:51	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34160	09/12/22 00:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34245	09/12/22 09:55	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34076	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 01:28	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 15:11	CH	EET MID

Client Sample ID: SW03 Lab Sample ID: 890-2882-3 Date Collected: 09/02/22 11:40 **Matrix: Solid**

Date Received: 09/02/22 14:56

	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	34272	09/12/22 10:28	EL	EET MI
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/14/22 04:38	AJ	EET MI
Total/NA	Analysis	Total BTEX		1			34245	09/12/22 09:55	AJ	EET MI
Total/NA	Analysis	8015 NM		1			34076	09/09/22 10:25	SM	EET MI
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34014	09/08/22 14:10	DM	EET MII
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 01:49	SM	EET MII
Soluble	Leach	DI Leach			5.02 g	50 mL	33840	09/06/22 12:41	KS	EET MII
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 15:20	CH	EET MII

Client Sample ID: SW04 Lab Sample ID: 890-2882-4 Date Collected: 09/02/22 11:50 Matrix: Solid

Date Received: 09/02/22 14:56

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34272	09/12/22 10:28	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/14/22 04:59	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34245	09/12/22 09:55	AJ	EET MID

Lab Chronicle

 Client: Ensolum
 Job ID: 890-2882-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Client Sample ID: SW04 Lab Sample ID: 890-2882-4

Date Collected: 09/02/22 11:50

Date Received: 09/02/22 14:56

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34076	09/09/22 10:25	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34014	09/08/22 14:10	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33968	09/09/22 02:11	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33840	09/06/22 12:41	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34020	09/09/22 18:19	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2882-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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	NI	ELAP	T104704400-22-24	06-30-23
The following analyte	s are included in this ren	ort but the laboratory is r	not certified by the governing authority.	This list may include analytes for wh
0 ,		ort, but the laboratory is i	ior certified by the governing authority.	This list may include analytes for wi
the agency does not		ort, but the laboratory is i	lot certified by the governing authority.	This list may include analytes for wi
0 ,		Matrix	Analyte	This list may include analytes for wi
the agency does not	offer certification.	•	, , ,	This list may include analytes for wi

Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2882-1

SDG: 03E1558048

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 21 BD 104H, 123H, 124H

Job ID: 890-2882-1

SDG: 03E1558048

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2882-1	SW01	Solid	09/02/22 11:20	09/02/22 14:56	0 - 2'
890-2882-2	SW02	Solid	09/02/22 11:30	09/02/22 14:56	0 - 2'
890-2882-3	SW03	Solid	09/02/22 11:40	09/02/22 14:56	0 - 3'
890-2882-4	SW04	Solid	09/02/22 11:50	09/02/22 14:56	0 - 2'

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Project Manager:

Ben Belill

Ensolum, LLC

City, State ZIP: Address: Company Name:

3122 National parks Hwy

Carlsbad, NM 88220

City, State ZIP:

Company Name: Bill to: (if different)

3104 E. Green Street Carlsbad, NM 88220

XTO Energy, Inc. Garrett Green

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

Work Order No:

	www.xenco.com	Page 1 of 1
	Work Order Comments	omments
	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	ifields RRC Superfund
	State of Project:	
	Reporting: Level II Level III PST/UST TRRP	/UST ☐ TRRP ☐ Level IV☐
	Deliverables: EDD	Other:
ᇛ	IS REQUEST	Preservative Codes

Turn Around	COCO AMERICA	7	Relinquished by: (Signature) Received	olice: Signature of this document and relinquishment of samples const service. Eurofins Xenco will be liable only for the cost of samples and Eurofins Xenco. A minimum charge of \$85.00 will be applied to each p	Circle Method(s) and Metal(s) to be analyzed	Total 200.7 / 6010 200.8 / 6020: 8F		1700		7		SW04 S 9.2.22	SW03 S 9.2.22	SW02 S 9.2.22	SW01 S 9.2.22	Sample Identification Matrix Sampled	Total Containers: Corrected Temperature:	Sample Custody Seals: Yes No (N/A Temperature Reading:	Cooler Custody Seals: Yes No NA Correction Factor:	Samples Received Intact: (Kes) No Thermometer ID:	SAMPLE RECEIPT Temp Blank: Yes No		Gilbert Moreno	EDDY COUNTY, NM	er:	Project Name: PLU 21 BD 104H, 123H, 124H
Pr None: N Cool: C HCL: H H ₂ SO ₄ : I H ₃ PO ₄ : NaHSO Na ₂ S ₂ O Zn Acet NaOH+ NaOH+ Na Sr TI N	Sent Stuff	DI OP	by: (Signature)	itutes a valid purchase order from Italians a valid purchase order from Italians and a charge of \$5 for eac	TCLP / SPLP 6010: 8	- 1						0-2'	0-3'	0-2'	0-2'	Depth		Reading: 5.4	ctor:	1		the lab, if received by 4:30pm	TAT starts the day received by			Turn Around
Pr None: N Cool: C HCL: H H ₂ SO ₄ : I H ₃ PO ₄ : NaHSO Na ₂ S ₂ O Zn Acet NaOH+ NaOH+ Na Sr TI N	154/2/2 14-3	10/00	Date/Time Relinquished by: (Signa	n client company to Eurofins Xenco, its affiliates and subcontractors. Ility for any losses or expenses incurred by the client if such losses a h sample submitted to Eurofins Xenco, but not analyzed. These terms	RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo	Al Sb As Ba Be B Cd Ca Cr Co Cu Fe						-1 ×	×	-1 × ×	×	CHLOR	890-2882 Chair					1			Pres.	ANALYSIS
	D. 1000 D. 100		iture) Received by: (Signature)	. It assigns standard terms and conditions are due to circumstances beyond the control s will be enforced unless previously negotiated.	Ni Se Ag Ti U Hg: 1631 / 245.1 / 7470 /	Mg Mn Mo Ni K Se Ag SiO ₂ Na Sr Tl Sn U		DAPP2211	nAPP22116	nAPP22097	Incident Number:				Cost Center	Sample Comments	-		Na ₂ S ₂ O ₃ : NaSO	Nativo4: NAtiv	H₃PO₄: HP	H ₂ S0 ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	QUEST Preservative Codes

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2882-1 SDG Number: 03E1558048

Login Number: 2882 **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	
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: 890-2882-1

SDG Number: 03E1558048

Login Number: 2882
List Source: Eurofins Midland
List Number: 2
List Creation: 09/07/22 11:42 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").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2883-1

Laboratory Sample Delivery Group: 03E1558048 Client Project/Site: PLU 21 BD 104H, 123H, 124H

For:

eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/14/2022 8:33:29 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Have a Question?

EOL

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Received by OCD: 9/21/2022 3:08:06 PM



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

 Client: Ensolum
 Laboratory Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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Definitions/Glossary

Job ID: 890-2883-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558048

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description**

F1 MS and/or MSD recovery exceeds control limits. 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

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

Job ID: 890-2883-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2883-1

Receipt

The samples were received on 9/2/2022 2:56 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.2°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34295 and analytical batch 880-34173 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 sample was outside control limits: FS18 (890-2883-8). 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: (LCSD 880-34272/2-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

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: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS06 Lab Sample ID: 890-2883-1

Date Collected: 09/02/22 09:00 Date Received: 09/02/22 14:56

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:19	
Toluene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:19	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:19	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/12/22 10:28	09/14/22 05:19	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:19	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/12/22 10:28	09/14/22 05:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	115		70 - 130			09/12/22 10:28	09/14/22 05:19	1
1,4-Difluorobenzene (Surr)	89		70 - 130			09/12/22 10:28	09/14/22 05:19	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/13/22 08:36	1
Method: 8015 NM - Diesel Range	•	, ,			_			
•	•	, ,	DI	Unit	n	Propared	Analyzod	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	•	Qualifier	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/09/22 11:30	
Analyte		Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH	Result <50.0	Qualifier U			<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <50.0	Qualifier U RO) (GC) Qualifier	50.0	mg/Kg			09/09/22 11:30	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <50.0 ge Organics (Dige Result)	Qualifier U RO) (GC) Qualifier U	50.0	mg/Kg		Prepared	09/09/22 11:30 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U RO) (GC) Qualifier U U F1	50.0 RL 50.0	mg/Kg Unit mg/Kg		Prepared 09/08/22 08:49	09/09/22 11:30 Analyzed 09/08/22 10:53	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U U F1	50.0 RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49	09/09/22 11:30 Analyzed 09/08/22 10:53	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U F1	50.0 RL 50.0 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49 09/08/22 08:49	09/09/22 11:30 Analyzed 09/08/22 10:53 09/08/22 10:53	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier U RO) (GC) Qualifier U U F1	50.0 RL 50.0 50.0 50.0 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared	09/09/22 11:30 Analyzed 09/08/22 10:53 09/08/22 10:53 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U RO) (GC) Qualifier U U F1 U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/09/22 11:30 Analyzed 09/08/22 10:53 09/08/22 10:53 Analyzed 09/08/22 10:53	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range 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 U RO) (GC) Qualifier U U F1 U Qualifier	50.0 RL 50.0 50.0 50.0 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/09/22 11:30 Analyzed 09/08/22 10:53 09/08/22 10:53 Analyzed 09/08/22 10:53	Dil Fac

Client Sample ID: FS07 Lab Sample ID: 890-2883-2

Date Collected: 09/02/22 09:10 Date Received: 09/02/22 14:56

Released to Imaging: 12/13/2022 2:43:30 PM

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/12/22 10:28	09/14/22 05:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			09/12/22 10:28	09/14/22 05:40	

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Matrix: Solid

Client: Ensolum

Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS07

Lab Sample ID: 890-2883-2 Date Collected: 09/02/22 09:10 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 3'

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	7.3	70 - 130	09/12/22 10:28	09/14/22 05:40	

Method:	Total BT	FX - Tota	IBTFX	Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402 U	0.00402	ma/Ka			09/13/22 08:36	1

Mothod: 2015 NM	Diocal Pango	Organice (DB	O) (CC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8 U	49.8	ma/Ka			09/09/22 11:30	1

Mathadi 001ED	NM Discal Day	an Organian	(DBO) (CC)
Method: 8015B	nivi - Diesei Kai	ide Ordanics	IDKUI IGGI

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 11:56	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 11:56	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 11:56	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	y Qualifier Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	83	70 - 130	09/08/22 08:49	09/08/22 11:56	1
o-Terphenyl	86	5 70 - 130	09/08/22 08:49	09/08/22 11:56	1

Method: 300.0) - Anions, Io	n Chromatograp	hy - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	369	5.01	mg/Kg			09/09/22 05:27	1

Client Sample ID: FS13 Lab Sample ID: 890-2883-3 Matrix: Solid

Date Collected: 09/02/22 09:20 Date Received: 09/02/22 14:56

Sample Depth: 3'

mounda. our ib volutile orga	illo compoundo ((33)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/12/22 13:31	09/13/22 00:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			09/12/22 13:31	09/13/22 00:21	1
1,4-Difluorobenzene (Surr)	84		70 - 130			09/12/22 13:31	09/13/22 00:21	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	KL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/13/22 08:36	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg		-	09/09/22 11:30	1

Matrix: Solid

Lab Sample ID: 890-2883-3

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS13

Date Collected: 09/02/22 09:20 Date Received: 09/02/22 14:56

Sample Depth: 3'

Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 12:17	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 12:17	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/08/22 08:49	09/08/22 12:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	88		70 - 130			09/08/22 08:49	09/08/22 12:17	1
o-Terphenyl	92		70 - 130			09/08/22 08:49	09/08/22 12:17	1
- Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	392		4.97	mg/Kg			09/09/22 05:32	1

Lab Sample ID: 890-2883-4 **Client Sample ID: FS14**

Date Collected: 09/02/22 09:30

Date Received: 09/02/22 14:56

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/12/22 13:31	09/13/22 00:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			09/12/22 13:31	09/13/22 00:41	1
1,4-Difluorobenzene (Surr)	86		70 - 130			09/12/22 13:31	09/13/22 00:41	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00402	U	0.00402	mg/Kg			09/13/22 08:36	1
			0.00402	mg/Kg			09/13/22 08:36	1
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						·
Method: 8015 NM - Diesel Range Analyte	Organics (DRO	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier			<u>D</u>	Prepared		·
Method: 8015 NM - Diesel Range Analyte	Organics (DRO Result <49.9	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	Organics (DR) Result 49.9 ge Organics (DI)	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	Organics (DR) Result 49.9 ge Organics (DI)	Qualifier U RO) (GC) Qualifier	RL 49.9	Unit mg/Kg		<u> </u>	Analyzed 09/09/22 11:30	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR) Result 49.9 ge Organics (DR) Result	Qualifier U RO) (GC) Qualifier U U		Unit mg/Kg		Prepared	Analyzed 09/09/22 11:30 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR) Result 49.9 ge Organics (DI) Result 49.9	Qualifier U RO) (GC) Qualifier U U	RL 49.9 RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/08/22 08:49	Analyzed 09/09/22 11:30 Analyzed 09/08/22 12:37	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR) Result 49.9 ge Organics (DI) Result 49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9 RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/08/22 08:49	Analyzed 09/09/22 11:30 Analyzed 09/08/22 12:37	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DR) Result <49.9 Georganics (DI) Result <49.9 <49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9 RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49	Analyzed 09/09/22 11:30 Analyzed 09/08/22 12:37 09/08/22 12:37	Dil Fac Dil Fac 1 1 1
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR) Result <49.9 Georganics (DI) Result <49.9 <49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9 RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/08/22 08:49 09/08/22 08:49 09/08/22 08:49	Analyzed 09/09/22 11:30 Analyzed 09/08/22 12:37 09/08/22 12:37	Dil Fac Dil Fac 1

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9/14/2022

Cheffit Sample

Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H Job ID: 890-2883-1

Lab Sample ID: 890-2883-4

SDG: 03E1558048

Matrix: Solid

Client Sample ID: FS14

Date Collected: 09/02/22 09:30

Date Received: 09/02/22 14:56

Sample Depth: 3'

Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Chloride	369		5.05	mg/Kg			09/09/22 05:37	1	

Client Sample ID: FS15

Date Collected: 09/02/22 09:40

Lab Sample ID: 890-2883-5

Matrix: Solid

Date Collected: 09/02/22 09:40 Date Received: 09/02/22 14:56

Sample Depth: 2'

(GRO)-C6-C10

Diesel Range Organics (Over

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/12/22 13:31	09/13/22 02:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			09/12/22 13:31	09/13/22 02:44	1
1,4-Difluorobenzene (Surr)	88		70 - 130			09/12/22 13:31	09/13/22 02:44	1

Total BTEX	<0.00398	U	0.00398	mg/Kg			09/13/22 08:36	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 11:30	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 12:58	1

Unit

mg/Kg

Prepared

09/08/22 08:49

Analyzed

09/08/22 12:58

Result Qualifier

<50.0 U

C10-C28) OII Range Organics (Over C28-C36)	<50.0 U	50.0	mg/Kg	09/08/22 08:49	09/08/22 12:58	1
Surrogate	%Recovery Qua	alifier Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	87	70 - 130		09/08/22 08:49	09/08/22 12:58	1
o-Terphenyl	89	70 - 130		09/08/22 08:49	09/08/22 12:58	1

50.0

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	249		5.02	mg/Kg			09/09/22 05:42	1

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2

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4

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14

Dil Fac

Client: Ensolum Job ID: 890-2883-1

Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS16 Lab Sample ID: 890-2883-6 Date Collected: 09/02/22 09:50 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 03:04	
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 03:04	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 03:04	
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/12/22 13:31	09/13/22 03:04	
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:31	09/13/22 03:04	
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/12/22 13:31	09/13/22 03:04	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	109		70 - 130			09/12/22 13:31	09/13/22 03:04	
1,4-Difluorobenzene (Surr)	83		70 - 130			09/12/22 13:31	09/13/22 03:04	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/13/22 08:36	
Analyte Total TPH	- <49.9	Qualifier U	49.9	Unit mg/Kg	D	Prepared	Analyzed 09/09/22 11:30	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	•
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 13:19	•
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 13:19	,
C10-C28) OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 13:19	
	0/5	Qualifier	Limits			Prepared	Analyzed	
Surrogate	%Recovery							Dil Fa
Surrogate 1-Chlorooctane	%Recovery 89		70 - 130			09/08/22 08:49	09/08/22 13:19	
			70 - 130 70 - 130			09/08/22 08:49 09/08/22 08:49	09/08/22 13:19 09/08/22 13:19	
1-Chlorooctane	89 90	Soluble						
1-Chlorooctane o-Terphenyl	89 90 omatography -	Soluble Qualifier		Unit	D			Dil Fac

Client Sample ID: FS17 Lab Sample ID: 890-2883-7

Date Collected: 09/02/22 10:00 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/12/22 13:31	09/13/22 03:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/12/22 13:31	09/13/22 03:25	1

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Matrix: Solid

Job ID: 890-2883-1

Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS17 Lab Sample ID: 890-2883-7 Date Collected: 09/02/22 10:00 Date Received: 09/02/22 14:56

Sample Depth: 2'

Client: Ensolum

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81	70 - 130	09/12/22 13:31	09/13/22 03:25	1

Method: To	ntal RTFY.	Total BTEX	Calculation
mictilou. It	Jiai Di La	TOTAL DIEX	Odiculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/13/22 08:36	1

Method: 8015 NM - Diesel Range Organics (DRO)	(GC)
incured to the Picsci Range Organics (Dixo)	\cdot

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	1

Method: 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		09/08/22 08:49	09/08/22 13:40	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 13:40	1
C10-C28)								
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 13:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

1-Chlorooctane	86	70 - 130
o-Terphenyl	88	70 - 130

_							
Method: 300.0 - Anions, Ion (Chromatography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Chloride 4.98 mg/Kg 09/09/22 06:01 119

Client Sample ID: FS18 Lab Sample ID: 890-2883-8 **Matrix: Solid**

Date Collected: 09/02/22 10:10 Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 8021B -	Volatile Organ	ic Compounds	(GC)
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motification volutile orga	illo compoundo ((33)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/13/22 09:09	09/13/22 11:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89		70 - 130			09/13/22 09:09	09/13/22 11:55	1
1,4-Difluorobenzene (Surr)	64	S1-	70 - 130			09/13/22 09:09	09/13/22 11:55	1

Mothod:	Total RTF	Y - Total R	TFX Calculatio	n

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	DII Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/13/22 08:36	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	175	50.0	mg/Kg			09/09/22 11:30	1

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09/08/22 08:49

09/08/22 08:49

09/08/22 13:40

09/08/22 13:40

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS18 Lab Sample ID: 890-2883-8

Date Collected: 09/02/22 10:10 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 14:00	1
Diesel Range Organics (Over C10-C28)	175		50.0	mg/Kg		09/08/22 08:49	09/08/22 14:00	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 14:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	82		70 - 130			09/08/22 08:49	09/08/22 14:00	1
o-Terphenyl	84		70 - 130			09/08/22 08:49	09/08/22 14:00	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
	Pocult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	Result	Quaiiioi					·,	

Lab Sample ID: 890-2883-9 **Client Sample ID: FS19** Matrix: Solid

Date Collected: 09/02/22 10:20 Date Received: 09/02/22 14:56

Sample Depth: 3'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
m-Xylene & p-Xylene	<0.00397	U	0.00397	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
Xylenes, Total	<0.00397	U	0.00397	mg/Kg		09/13/22 09:09	09/13/22 12:15	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130			09/13/22 09:09	09/13/22 12:15	1
1,4-Difluorobenzene (Surr)	108		70 - 130			09/13/22 09:09	09/13/22 12:15	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00397	U	0.00397	mg/Kg			09/13/22 08:36	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	1
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:22	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:22	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:22	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			09/08/22 08:49	09/08/22 14:22	1

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9/14/2022

Lab Sample ID: 890-2883-9

Job ID: 890-2883-1

Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS19

Date Collected: 09/02/22 10:20 Date Received: 09/02/22 14:56

Sample Depth: 3'

	Method: 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Į	Chloride	99.9		5.01	mg/Kg			09/09/22 06:12	1	

Client Sample ID: FS20 Lab Sample ID: 890-2883-10 Matrix: Solid

Date Collected: 09/02/22 10:30 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.00336		0.00199	mg/Kg		09/12/22 13:37	09/13/22 01:51	
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 01:51	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 01:51	
m-Xylene & p-Xylene	0.00476		0.00398	mg/Kg		09/12/22 13:37	09/13/22 01:51	
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 01:51	
Xylenes, Total	0.00476		0.00398	mg/Kg		09/12/22 13:37	09/13/22 01:51	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	81		70 - 130			09/12/22 13:37	09/13/22 01:51	
1,4-Difluorobenzene (Surr)	122		70 - 130			09/12/22 13:37	09/13/22 01:51	
Method: Total BTEX - Total BTE	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	0.00812		0.00398	mg/Kg			09/13/22 08:36	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	•
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:42	,
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:42	,
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 14:42	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	88		70 - 130			09/08/22 08:49	09/08/22 14:42	
o-Terphenyl	92		70 - 130			09/08/22 08:49	09/08/22 14:42	
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	52.5		4.99	mg/Kg			09/09/22 06:17	

Client: Ensolum

Job ID: 890-2883-1

Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

> Lab Sample ID: 890-2883-11 Matrix: Solid

Date Collected: 09/02/22 10:40 Date Received: 09/02/22 14:56

Client Sample ID: FS21

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 02:11	
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 02:11	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 02:11	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 02:11	
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 02:11	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 02:11	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	106		70 - 130			09/12/22 13:37	09/13/22 02:11	
1,4-Difluorobenzene (Surr)	107		70 - 130			09/12/22 13:37	09/13/22 02:11	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/13/22 08:36	
Analyte Total TPH	<50.0	Qualifier U	50.0	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/09/22 11:30	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 11:30	
Method: 8015B NM - Diesel Rang								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	
Analyte Gasoline Range Organics		Qualifier	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared 09/08/22 08:49	Analyzed 09/08/22 15:24	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			<u>D</u>			
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result < 50.0	Qualifier U	50.0	mg/Kg	<u>D</u>	09/08/22 08:49	09/08/22 15:24	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <50.0 <50.0	Qualifier U U U	50.0	mg/Kg	<u> </u>	09/08/22 08:49 09/08/22 08:49	09/08/22 15:24 09/08/22 15:24	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0 <50.0 <50.0	Qualifier U U U	50.0 50.0 50.0	mg/Kg	<u>D</u>	09/08/22 08:49 09/08/22 08:49 09/08/22 08:49	09/08/22 15:24 09/08/22 15:24 09/08/22 15:24	
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 <50.0 <50.0 <50.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70.0 <70	Qualifier U U U	50.0 50.0 50.0 <i>Limits</i>	mg/Kg	<u> </u>	09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared	09/08/22 15:24 09/08/22 15:24 09/08/22 15:24 Analyzed	
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: 300.0 - Anions, Ion Chro	Result	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/08/22 15:24 09/08/22 15:24 09/08/22 15:24 Analyzed 09/08/22 15:24	Dil Fa
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	Qualifier U U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	09/08/22 08:49 09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/08/22 15:24 09/08/22 15:24 09/08/22 15:24 Analyzed 09/08/22 15:24	Dil Fa

Client Sample ID: FS22 Lab Sample ID: 890-2883-12

Date Collected: 09/02/22 10:50 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/12/22 13:37	09/13/22 02:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			09/12/22 13:37	09/13/22 02:31	1

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Matrix: Solid

Client: Ensolum

Job ID: 890-2883-1

Client: Ensolum Job ID: 890-2883-1
Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS22

Date Collected: 09/02/22 10:50

Lab Sample ID: 890-2883-12

Matrix: Solid

Date Collected: 09/02/22 10:50
Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	98	70 - 130	09/12/22 13:37	09/13/22 02:31	1

Method: Total	BTEX - Total	BTEX Calculation	าท

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTFX	<0.00402 U	0.00402	ma/Ka			09/13/22 08:36	1

Mothod: 2015 NM	Diccol Pango	Organice	(DPO) (GC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.9 U	49.9	ma/Ka			09/09/22 11:30	1	

Method: 8015B	NM - Diesel	Range Ord	anics	(DRO)	(GC)
motilioa. oo lob	THE DIGGGE	Trainge Oit	garnos	(5.10)	100)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 15:45	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 15:45	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 15:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	93	70 - 130	09/08/22 08:49	09/08/22 15:45	1
o-Terphenyl	98	70 - 130	09/08/22 08:49	09/08/22 15:45	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46.4		5.04	mg/Kg			09/09/22 06:36	1

Client Sample ID: FS23

Date Collected: 09/02/22 11:00

Lab Sample ID: 890-2883-13

Matrix: Solid

Date Collected: 09/02/22 11:00 Date Received: 09/02/22 14:56

Sample Depth: 2'

Method: 8021B - Volatile Organic Compounds (C	GC))
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michiod. 002 ID - Volatile Orga	inic compounds ((30)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/12/22 13:37	09/13/22 02:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			09/12/22 13:37	09/13/22 02:52	1
1,4-Difluorobenzene (Surr)	102		70 - 130			09/12/22 13:37	09/13/22 02:52	1

ı						
ı	Mothod	Total	DTEV	Total	DTEV	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403	ma/Ka			09/13/22 08:36	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg		-	09/09/22 11:30	1

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Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS23 Lab Sample ID: 890-2883-13

Date Collected: 09/02/22 11:00 Matrix: Solid Date Received: 09/02/22 14:56

Sample Depth: 2'

Client: Ensolum

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:06	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:06	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			09/08/22 08:49	09/08/22 16:06	1
o-Terphenyl	94		70 - 130			09/08/22 08:49	09/08/22 16:06	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2883-14 **Client Sample ID: FS24** Matrix: Solid

Date Collected: 09/02/22 11:10 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/12/22 13:37	09/13/22 03:12	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	92		70 - 130			09/12/22 13:37	09/13/22 03:12	1
1,4-Difluorobenzene (Surr)	102		70 - 130			09/12/22 13:37	09/13/22 03:12	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/13/22 08:36	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 11:30	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 16:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 16:27	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 16:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			09/08/22 08:49	09/08/22 16:27	1
o-Terphenyl	90		70 - 130			09/08/22 08:49	09/08/22 16:27	1

Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H Job ID: 890-2883-1

SDG: 03E1558048

Matrix: Solid

Client Sample ID: FS24

Date Collected: 09/02/22 11:10 Date Received: 09/02/22 14:56

Sample Depth: 2'

Lab Sample ID: 890-2883-14

Method: 300.0 - Anior	ns, Ion Chromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24.7		4.96	mg/Kg			09/09/22 06:55	1

Client Sample ID: FS25 Lab Sample ID: 890-2883-15 **Matrix: Solid**

Date Collected: 09/02/22 11:20 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 03:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			09/12/22 13:37	09/13/22 03:33	1
1,4-Difluorobenzene (Surr)	105		70 - 130			09/12/22 13:37	09/13/22 03:33	1
Method: Total BTEX - Total BTEX Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398		0.00398	 		Frepareu	09/13/22 08:36	DII Fac
Method: 8015 NM - Diesel Range	Organice (DD)	o) (ec)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:48	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:48	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 16:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
						00/00/00 00 10	00/00/00 10 10	
1-Chlorooctane	98		70 - 130			09/08/22 08:49	09/08/22 16:48	1

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Analyzed 09/09/22 07:00

RL

4.96

Unit

mg/Kg

D

Prepared

Dil Fac

Analyte

Chloride

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

40.9

Lab Sample ID: 890-2883-16

Client: Ensolum

Job ID: 890-2883-1

Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS26
Date Collected: 09/02/22 11:30
Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/12/22 13:37	09/13/22 03:53	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			09/12/22 13:37	09/13/22 03:53	1
1,4-Difluorobenzene (Surr)	117		70 - 130			09/12/22 13:37	09/13/22 03:53	1
- Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/13/22 08:36	1
Analyte Total TPH		Qualifier U	RL 50.0	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/09/22 11:30	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/09/22 11:30	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	
								Dil Fac
5 5	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 17:09	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0 <50.0		50.0	mg/Kg		09/08/22 08:49	09/08/22 17:09 09/08/22 17:09	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)		U						1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 17:09	1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	<50.0 <50.0	U	50.0	mg/Kg		09/08/22 08:49 09/08/22 08:49	09/08/22 17:09 09/08/22 17:09	1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<50.0 <50.0 %Recovery	U	50.0 50.0 <i>Limits</i>	mg/Kg		09/08/22 08:49 09/08/22 08:49 Prepared	09/08/22 17:09 09/08/22 17:09 <i>Analyzed</i>	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<50.0 <50.0 **Recovery 84 88	U U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130	mg/Kg		09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/08/22 17:09 09/08/22 17:09 Analyzed 09/08/22 17:09	1 1 1 Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<50.0 <50.0 **Recovery 84 88 **Dematography -	U U Qualifier	50.0 50.0 <u>Limits</u> 70 - 130	mg/Kg		09/08/22 08:49 09/08/22 08:49 Prepared 09/08/22 08:49	09/08/22 17:09 09/08/22 17:09 Analyzed 09/08/22 17:09	1 1 1 1 1 Dil Fac

Client Sample ID: FS27

Date Collected: 09/02/22 11:40 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/12/22 13:37	09/13/22 04:13	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			09/12/22 13:37	09/13/22 04:13	1

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Lab Sample ID: 890-2883-17

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Matrix: Solid

09/13/22 08:36

09/08/22 17:30

09/08/22 08:49

Prepared

Client Sample Results

Client: Ensolum Job ID: 890-2883-1 SDG: 03E1558048 Project/Site: PLU 21 BD 104H, 123H, 124H

Client Sample ID: FS27 Lab Sample ID: 890-2883-17

Date Collected: 09/02/22 11:40 **Matrix: Solid** Date Received: 09/02/22 14:56

Sample Depth: 2'

Total BTEX

Method: 8021B - Volatile Organic	Compounds (GC) (Conti	nued)					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130			09/12/22 13:37	09/13/22 04:13	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Method: 8015 NM - Diesel Range C	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/09/22 11:30	1

0.00401

mg/Kg

<0.00401 U

92

Result Qualifier

<49.9 U

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:30	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:30	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	<u>87</u>		70 130			09/08/22 08:49	09/08/22 17:30	

Method: 300.0 - Anions, Ion Chron	natography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	528	5.02	mg/Kg			09/09/22 07:10	1

70 - 130

Lab Sample ID: 890-2883-18 **Client Sample ID: FS28 Matrix: Solid**

Date Collected: 09/02/22 11:50 Date Received: 09/02/22 14:56

Analyte

Total TPH

o-Terphenyl

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/13/22 09:09	09/13/22 11:34	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/13/22 09:09	09/13/22 11:34	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/13/22 09:09	09/13/22 11:34	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/13/22 09:09	09/13/22 11:34	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/13/22 09:09	09/13/22 11:34	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/13/22 09:09	09/13/22 11:34	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130			09/13/22 09:09	09/13/22 11:34	1
1,4-Difluorobenzene (Surr)	94		70 - 130			09/13/22 09:09	09/13/22 11:34	1
Method: Total BTEX - Total BT	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/13/22 08:36	

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Dil Fac

Analyzed

09/09/22 11:30

RL

49.9

Unit

mg/Kg

Lab Sample ID: 890-2883-18

Client Sample Results

 Client: Ensolum
 Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Client Sample ID: FS28

Date Collected: 09/02/22 11:50 Date Received: 09/02/22 14:56

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:50	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:50	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/08/22 08:49	09/08/22 17:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			09/08/22 08:49	09/08/22 17:50	1
o-Terphenyl	102		70 - 130			09/08/22 08:49	09/08/22 17:50	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			4.97	mg/Kg			09/09/22 07:15	

1

6

8

4.0

11

13

14

Surrogate Summary

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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)	
880-19046-A-6-G MS	Matrix Spike	106	102	
880-19046-A-6-H MSD	Matrix Spike Duplicate	110	101	
90-2883-1	FS06	115	89	
90-2883-2	FS07	106	73	
90-2883-3	FS13	109	84	
90-2883-4	FS14	107	86	
90-2883-5	FS15	109	88	
390-2883-6	FS16	109	83	
390-2883-7	FS17	107	81	
390-2883-8	FS18	89	64 S1-	
390-2883-9	FS19	106	108	
390-2883-10	FS20	81	122	
90-2883-11	FS21	106	107	
390-2883-12	FS22	97	98	
390-2883-13	FS23	99	102	
90-2883-14	FS24	92	102	
90-2883-15	FS25	97	105	
90-2883-16	FS26	94	117	
90-2883-17	FS27	102	99	
90-2883-18	FS28	102	94	
90-2883-18 MS	FS28	113	102	
0-2883-18 MSD	FS28	119	107	
90-2909-A-1-G MS	Matrix Spike	117	108	
90-2909-A-1-H MSD	Matrix Spike Duplicate	122	110	
.CS 880-34272/1-A	Lab Control Sample	127	98	
CS 880-34295/1-A	Lab Control Sample	116	109	
_CS 880-34296/1-A	Lab Control Sample	108	92	
.CS 880-34351/1-A	Lab Control Sample	113	106	
_CSD 880-34272/2-A	Lab Control Sample Dup	67 S1-	99	
CSD 880-34295/2-A	Lab Control Sample Dup	110	107	
_CSD 880-34296/2-A	Lab Control Sample Dup	118	93	
LCSD 880-34351/2-A	Lab Control Sample Dup	113	106	
MB 880-34213/5-A	Method Blank	96	86	
MB 880-34272/5-A	Method Blank	98	85	
MB 880-34295/5-A	Method Blank	93	92	
MB 880-34296/5-A	Method Blank	106	112	
MB 880-34351/5-A	Method Blank	99	90	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2883-1	FS06	82	85	
890-2883-1 MS	FS06	76	72	

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2883-1 MSD	FS06	79	73	
890-2883-2	FS07	83	86	
890-2883-3	FS13	88	92	
890-2883-4	FS14	86	89	
890-2883-5	FS15	87	89	
890-2883-6	FS16	89	90	
890-2883-7	FS17	86	88	
890-2883-8	FS18	82	84	
890-2883-9	FS19	91	95	
890-2883-10	FS20	88	92	
890-2883-11	FS21	90	94	
890-2883-12	FS22	93	98	
890-2883-13	FS23	89	94	
890-2883-14	FS24	86	90	
890-2883-15	FS25	98	104	
890-2883-16	FS26	84	88	
890-2883-17	FS27	87	92	
890-2883-18	FS28	96	102	
LCS 880-33980/2-A	Lab Control Sample	94	103	
LCSD 880-33980/3-A	Lab Control Sample Dup	100	108	
MB 880-33980/1-A	Method Blank	90	96	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2883-1 SDG: 03E1558048 Project/Site: PLU 21 BD 104H, 123H, 124H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34213/5-A

Matrix: Solid

Analysis Batch: 34173

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34213

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 09:23	09/12/22 10:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/12/22 09:23	09/12/22 10:47	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	86		70 - 130

09/12/22 10:47 09/12/22 09:23 09/12/22 10:47

Analyzed

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 34272

Dil Fac

Prepared

09/12/22 09:23

Analysis Batch: 34340

Matrix: Solid

Lab Sample ID: MB 880-34272/5-A

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:28	09/13/22 21:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/12/22 10:28	09/13/22 21:47	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Pre	epared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130	09/12	/22 10:28	09/13/22 21:47	1
1,4-Difluorobenzene (Surr)	85		70 - 130	09/12	/22 10:28	09/13/22 21:47	1

Lab Sample ID: LCS 880-34272/1-A

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 34272

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08116		mg/Kg		81	70 - 130	
Toluene	0.100	0.08046		mg/Kg		80	70 - 130	
Ethylbenzene	0.100	0.09042		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1950		mg/Kg		97	70 - 130	
o-Xylene	0.100	0.1131		mg/Kg		113	70 - 130	

LCS LCS

Surrogate	%Recovery Qualif	ier Limits
4-Bromofluorobenzene (Surr)	127	70 - 130
1,4-Difluorobenzene (Surr)	98	70 - 130

Lab Sample ID: LCSD 880-34272/2-A

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Lab	Control Sample Dup
	Drop Type, Total/NA

Prep Type: Total/NA

Prep Batch: 34272

	Бріке		290			%Rec		KPD
Analyte	Added	Result Qu	ualifier Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.07578	mg/Kg		76	70 - 130	7	35

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Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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

Lab Sample ID: LCSD 880-34272/2-A

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34272

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.08052		mg/Kg		81	70 - 130	0	35
Ethylbenzene	0.100	0.09275		mg/Kg		93	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2014		mg/Kg		101	70 - 130	3	35
o-Xvlene	0.100	0.1170		ma/Ka		117	70 - 130	3	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	67	S1-	70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: MB 880-34295/5-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 34173

мв мв

Prep Type: Total/NA

Prep Batch: 34295

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 09/12/22 13:31 09/12/22 21:57 mg/Kg Toluene <0.00200 U 0.00200 09/12/22 13:31 09/12/22 21:57 mg/Kg Ethylbenzene <0.00200 U 0.00200 09/12/22 13:31 09/12/22 21:57 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 09/12/22 13:31 09/12/22 21:57 mg/Kg o-Xylene <0.00200 U 0.00200 mg/Kg 09/12/22 13:31 09/12/22 21:57 Xylenes, Total <0.00400 U 0.00400 09/12/22 13:31 09/12/22 21:57 mg/Kg

MB MB

Surrogate	%Recovery Qualifi	er Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93	70 - 130	09/12/22 13:31	09/12/22 21:57	1
1,4-Difluorobenzene (Surr)	92	70 - 130	09/12/22 13:31	09/12/22 21:57	1

Lab Sample ID: LCS 880-34295/1-A

Matrix: Solid

Analysis Batch: 34173

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34295

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08965		mg/Kg		90	70 - 130	
Toluene	0.100	0.07941		mg/Kg		79	70 - 130	
Ethylbenzene	0.100	0.08581		mg/Kg		86	70 - 130	
m-Xylene & p-Xylene	0.200	0.1763		mg/Kg		88	70 - 130	
o-Xylene	0.100	0.1027		mg/Kg		103	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifi	ier Limits
4-Bromofluorobenzene (Surr)	116	70 _ 130
1.4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: LCSD 880-34295/2-A

Matrix: Solid

Analysis Batch: 34173

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34295

-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08509		mg/Kg		85	70 - 130	5	35
Toluene	0.100	0.07692		mg/Kg		77	70 - 130	3	35
Ethylbenzene	0.100	0.07998		mg/Kg		80	70 - 130	7	35

QC Sample Results

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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

Lab Sample ID: LCSD 880-34295/2-A

Matrix: Solid Analysis Batch: 34173 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34295

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
m-Xylene & p-Xylene	0.200	0.1649		mg/Kg		82	70 - 130	7	35
o-Xylene	0.100	0.09309		mg/Kg		93	70 - 130	10	35

LCSD LCSD %Recovery Qualifier Limits Surrogate 4-Bromofluorobenzene (Surr) 70 - 130 110 107 70 - 130 1,4-Difluorobenzene (Surr)

Lab Sample ID: 890-2909-A-1-G MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 34173

Prep Type: Total/NA

Prep Batch: 34295

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.08265		mg/Kg		83	70 - 130	
Toluene	<0.00200	U	0.0998	0.07198		mg/Kg		72	70 - 130	
Ethylbenzene	<0.00200	U	0.0998	0.07267		mg/Kg		73	70 - 130	
m-Xylene & p-Xylene	<0.00399	U F1	0.200	0.1366	F1	mg/Kg		68	70 - 130	
o-Xylene	<0.00200	U	0.0998	0.08208		mg/Kg		82	70 - 130	

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	108	70 - 130

Lab Sample ID: 890-2909-A-1-H MSD

Matrix: Solid

Analysis Batch: 34173

Prep Type: Total/NA Prep Batch: 34295

MSD MSD Spike RPD Sample Sample %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 70 - 130 Benzene <0.00200 U 0.100 0.09325 93 12 35 mg/Kg Toluene <0.00200 U 0.100 0.07646 mg/Kg 76 70 - 130 6 35 Ethylbenzene <0.00200 0.100 0.07457 mg/Kg 74 70 - 130 3 35 m-Xylene & p-Xylene <0.00399 UF1 0.200 0.1342 F1 mg/Kg 67 70 - 130 2 35 o-Xylene <0.00200 U 0.100 0.08506 mg/Kg 70 - 130 35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	122	70 - 130
1.4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: MB 880-34296/5-A

Matrix: Solid

Analysis Batch: 34301

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34296

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/12/22 19:47	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/12/22 19:47	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/12/22 19:47	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/12/22 13:37	09/12/22 19:47	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 13:37	09/12/22 19:47	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/12/22 13:37	09/12/22 19:47	1

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Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

Prep Batch: 34296

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

	МВ	МВ				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		70 - 130	09/12/22 13:37	09/12/22 19:47	1
1,4-Difluorobenzene (Surr)	112		70 - 130	09/12/22 13:37	09/12/22 19:47	1

Lab Sample ID: LCS 880-34296/1-A **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 34301

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08335		mg/Kg		83	70 - 130	
Toluene	0.100	0.09156		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.09626		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.2062		mg/Kg		103	70 - 130	
o-Xylene	0.100	0.1043		mg/Kg		104	70 - 130	

LCS LCS %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 108 1,4-Difluorobenzene (Surr) 92 70 - 130

Lab Sample ID: LCSD 880-34296/2-A

Matrix: Solid

Analysis Batch: 34301

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

Prep Batch: 34296

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08280		mg/Kg		83	70 - 130	1	35
Toluene	0.100	0.09450		mg/Kg		94	70 - 130	3	35
Ethylbenzene	0.100	0.09622		mg/Kg		96	70 - 130	0	35
m-Xylene & p-Xylene	0.200	0.2057		mg/Kg		103	70 - 130	0	35
o-Xylene	0.100	0.1068		mg/Kg		107	70 - 130	2	35

LCSD LCSD %Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 118 1,4-Difluorobenzene (Surr) 93 70 - 130

Lab Sample ID: 880-19046-A-6-G MS

Matrix: Solid

Analysis Batch: 34301

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

Prep Batch: 34296

MS MS %Rec Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 0.0998 0.08107 Benzene <0.00199 81 70 - 130 mg/Kg Toluene <0.00199 0.0998 0.07936 70 - 130 U mg/Kg 80 0.0998 Ethylbenzene <0.00199 U 0.07798 mg/Kg 78 70 - 130 m-Xylene & p-Xylene <0.00398 U 0.200 0.1659 mg/Kg 83 70 - 130 o-Xylene <0.00199 U 0.0998 0.08435 mg/Kg 85 70 - 130

MS MS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 70 - 130 106 102 70 - 130 1,4-Difluorobenzene (Surr)

QC Sample Results

Job ID: 890-2883-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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

Lab Sample ID: 880-19046-A-6-H MSD

Matrix: Solid Analysis Batch: 34301 Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34296

RPD Limit %Rec Limits RPD 77 70 - 130 6 35

Sample Sample Spike MSD MSD Result Qualifier Analyte Added Result Qualifier Unit Benzene <0.00199 U 0.0990 0.07641 mg/Kg Toluene <0.00199 U 0.0990 0.07525 mg/Kg 76 70 - 130 5 35 Ethylbenzene <0.00199 U 0.0990 0.07499 mg/Kg 76 70 - 130 35 35 m-Xylene & p-Xylene <0.00398 U 0.198 0.1597 mg/Kg 81 70 - 130 0.0990 70 - 130 o-Xylene <0.00199 U 0.08073 mg/Kg 82 35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	110		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: MB 880-34351/5-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 34340

Prep Type: Total/NA

09/13/22 11:13

Prep Batch: 34351

Result Qualifier Unit Analyzed Dil Fac Analyte RL D Prepared Benzene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 Toluene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 Ethylbenzene <0.00200 U 0.00200 mg/Kg 09/13/22 09:09 09/13/22 11:13 m-Xylene & p-Xylene <0.00400 U 0.00400 09/13/22 09:09 09/13/22 11:13 mg/Kg 0.00200 09/13/22 11:13 o-Xylene <0.00200 U mg/Kg 09/13/22 09:09

0.00400

mg/Kg

MB MB

<0.00400 U

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/13/22 09:09	09/13/22 11:13	1
1,4-Difluorobenzene (Surr)	90		70 - 130	09/13/22 09:09	09/13/22 11:13	1

Lab Sample ID: LCS 880-34351/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Xylenes, Total

Analysis Batch: 34340

Prep Type: Total/NA Prep Batch: 34351

09/13/22 09:09

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08589		mg/Kg		86	70 - 130	
Toluene	0.100	0.07897		mg/Kg		79	70 - 130	
Ethylbenzene	0.100	0.08358		mg/Kg		84	70 - 130	
m-Xylene & p-Xylene	0.200	0.1728		mg/Kg		86	70 - 130	
o-Xylene	0.100	0.1017		mg/Kg		102	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	113	70 - 130
1,4-Difluorobenzene (Surr)	106	70 - 130

Lab Sample ID: LCSD 880-34351/2-A

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 34351

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08544		mg/Kg		85	70 - 130	1	35
Toluene	0.100	0.08090		mg/Kg		81	70 - 130	2	35

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QC Sample Results

 Client: Ensolum
 Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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

Lab Sample ID: LCSD 880-34351/2-A

Matrix: Solid

Analysis Batch: 34340

Client	Sample	ID:	Lab	Control	Sample	Dup

Prep Type: Total/NA Prep Batch: 34351

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Ethylbenzene 0.100 0.08428 84 70 - 130 35 mg/Kg m-Xylene & p-Xylene 0.200 0.1741 mg/Kg 87 70 - 130 35 0.100 0.1008 o-Xylene 101 70 - 130 mg/Kg

LCSD LCSD

Surrogate	%Recovery Qι	ıalifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	106		70 - 130

Lab Sample ID: 890-2883-18 MS

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: FS28
Prep Type: Total/NA

Prep Batch: 34351

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier %Rec Limits Analyte Unit 0.0998 Benzene <0.00199 U 0.07796 mg/Kg 78 70 - 130 Toluene <0.00199 0.0998 0.07251 73 mg/Kg 70 - 130 Ethylbenzene <0.00199 U 0.0998 0.07915 mg/Kg 79 70 - 130 <0.00398 U 0.200 0.1613 81 70 - 130 m-Xylene & p-Xylene mg/Kg 0.0998 <0.00199 U 0.09278 93 70 - 130 o-Xylene mg/Kg

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	113		70 - 130
1,4-Difluorobenzene (Surr)	102		70 - 130

Lab Sample ID: 890-2883-18 MSD

Matrix: Solid

Analysis Batch: 34340

Client Sample ID: FS28
Prep Type: Total/NA

Prep Batch: 34351

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U	0.0996	0.08998		mg/Kg		90	70 - 130	14	35
Toluene	<0.00199	U	0.0996	0.08317		mg/Kg		84	70 - 130	14	35
Ethylbenzene	<0.00199	U	0.0996	0.09130		mg/Kg		92	70 - 130	14	35
m-Xylene & p-Xylene	<0.00398	U	0.199	0.1882		mg/Kg		94	70 - 130	15	35
o-Xylene	<0.00199	U	0.0996	0.1079		mg/Kg		108	70 - 130	15	35

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	119	70 - 130
1,4-Difluorobenzene (Surr)	107	70 - 130

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

Lab Sample ID: MB 880-33980/1-A

Matrix: Solid

Analysis Batch: 33972

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

Prep Type: Total/NA Prep Batch: 33980

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 09:52	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 09:52	1
C10-C28)								

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Client: Ensolum

Job ID: 890-2883-1

SDG: 03E1558048

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

Lab Sample ID: MB 880-33980/1-A

Lab Sample ID: LCS 880-33980/2-A

Project/Site: PLU 21 BD 104H, 123H, 124H

Matrix: Solid

Analysis Batch: 33972

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 33980

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/08/22 08:49	09/08/22 09:52	1

мв мв

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130	09/08/22 08:49	09/08/22 09:52	1
o-Terphenyl	96		70 - 130	09/08/22 08:49	09/08/22 09:52	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Matrix: Solid Prep Batch: 33980 **Analysis Batch: 33972** Spike LCS LCS

Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics 1000 890.1 mg/Kg 89 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 903.3 mg/Kg 90 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	103		70 - 130

Lab Sample ID: LCSD 880-33980/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 33972

Prep Type: Total/NA Prep Batch: 33980

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit 1000 873.8 87 20 Gasoline Range Organics mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 984.9 98 70 - 130 20 mg/Kg C10-C28)

70 - 130

LCSD LCSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 100 70 - 130

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Lab Sample ID: 890-2883-1 MS

Released to Imaging: 12/13/2022 2:43:30 PM

Matrix: Solid

o-Terphenyl

Analysis Batch: 33972

Client Sample ID: FS06

Prep Batch: 33980

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <50.0 U Gasoline Range Organics 999 1046 mg/Kg 103 70 - 130(GRO)-C6-C10 999 Diesel Range Organics (Over <50.0 U F1 679.4 F1 mg/Kg 68 70 - 130

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	76		70 - 130
o-Terphenyl	72		70 - 130

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Prep Type: Total/NA

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558048

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

Lab Sample ID: 890-2883-1 MSD Client Sample ID: FS06 **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33972 Prep Batch: 33980

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<50.0	U	996	1089		mg/Kg		108	70 - 130	4	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<50.0	U F1	996	704.6		mg/Kg		71	70 - 130	4	20
0.40, 0.00)											

C10-C28)

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 79 o-Terphenyl 73 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33839/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34019

мв мв Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 09/09/22 04:58

Lab Sample ID: LCS 880-33839/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34019

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	241.9		mg/Kg		97	90 - 110	

Lab Sample ID: LCSD 880-33839/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34019

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 242.6 97 90 - 110 mg/Kg 0

Lab Sample ID: 890-2883-1 MS Client Sample ID: FS06 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34019

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	430		250	654.0		ma/Ka	_	90	90 110	

Lab Sample ID: 890-2883-1 MSD **Client Sample ID: FS06 Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34019

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	430		250	655.3		mg/Kg		90	90 - 110	0	20

QC Sample Results

 Client: Ensolum
 Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-2883-11 MS

Matrix: Solid

Client Sample ID: FS21

Prep Type: Soluble

Analysis Batch: 34019

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	178		253	410.9		mg/Kg		92	90 - 110	

Lab Sample ID: 890-2883-11 MSD

Matrix: Solid

Client Sample ID: FS21

Prep Type: Soluble

Analysis Batch: 34019

Sample Sample Spike MSD MSD %Rec RPD Limit Analyte Result Qualifier Added Result Qualifier %Rec Limits RPD Unit Chloride 178 253 411.1 mg/Kg 92 90 - 110 0

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QC Association Summary

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC VOA

Analysis Batch: 34173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-3	FS13	Total/NA	Solid	8021B	34295
890-2883-4	FS14	Total/NA	Solid	8021B	34295
890-2883-5	FS15	Total/NA	Solid	8021B	34295
890-2883-6	FS16	Total/NA	Solid	8021B	34295
890-2883-7	FS17	Total/NA	Solid	8021B	34295
MB 880-34213/5-A	Method Blank	Total/NA	Solid	8021B	34213
MB 880-34295/5-A	Method Blank	Total/NA	Solid	8021B	34295
LCS 880-34295/1-A	Lab Control Sample	Total/NA	Solid	8021B	34295
LCSD 880-34295/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34295
890-2909-A-1-G MS	Matrix Spike	Total/NA	Solid	8021B	34295
890-2909-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34295

Prep Batch: 34213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34213/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	5035	_ <u>- </u>
890-2883-2	FS07	Total/NA	Solid	5035	
MB 880-34272/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34272/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34272/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Prep Batch: 34295

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-3	FS13	Total/NA	Solid	5035	
890-2883-4	FS14	Total/NA	Solid	5035	
890-2883-5	FS15	Total/NA	Solid	5035	
890-2883-6	FS16	Total/NA	Solid	5035	
890-2883-7	FS17	Total/NA	Solid	5035	
MB 880-34295/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34295/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34295/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2909-A-1-G MS	Matrix Spike	Total/NA	Solid	5035	
890-2909-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 34296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-10	FS20	Total/NA	Solid	5035	
890-2883-11	FS21	Total/NA	Solid	5035	
890-2883-12	FS22	Total/NA	Solid	5035	
890-2883-13	FS23	Total/NA	Solid	5035	
890-2883-14	FS24	Total/NA	Solid	5035	
890-2883-15	FS25	Total/NA	Solid	5035	
890-2883-16	FS26	Total/NA	Solid	5035	
890-2883-17	FS27	Total/NA	Solid	5035	
MB 880-34296/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34296/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34296/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19046-A-6-G MS	Matrix Spike	Total/NA	Solid	5035	

QC Association Summary

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC VOA (Continued)

Prep Batch: 34296 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-19046-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34301

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-10	FS20	Total/NA	Solid	8021B	34296
890-2883-11	FS21	Total/NA	Solid	8021B	34296
890-2883-12	FS22	Total/NA	Solid	8021B	34296
890-2883-13	FS23	Total/NA	Solid	8021B	34296
890-2883-14	FS24	Total/NA	Solid	8021B	34296
890-2883-15	FS25	Total/NA	Solid	8021B	34296
890-2883-16	FS26	Total/NA	Solid	8021B	34296
890-2883-17	FS27	Total/NA	Solid	8021B	34296
MB 880-34296/5-A	Method Blank	Total/NA	Solid	8021B	34296
LCS 880-34296/1-A	Lab Control Sample	Total/NA	Solid	8021B	34296
LCSD 880-34296/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34296
880-19046-A-6-G MS	Matrix Spike	Total/NA	Solid	8021B	34296
880-19046-A-6-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34296

Analysis Batch: 34340

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	8021B	34272
890-2883-2	FS07	Total/NA	Solid	8021B	34272
890-2883-8	FS18	Total/NA	Solid	8021B	34351
890-2883-9	FS19	Total/NA	Solid	8021B	34351
890-2883-18	FS28	Total/NA	Solid	8021B	34351
MB 880-34272/5-A	Method Blank	Total/NA	Solid	8021B	34272
MB 880-34351/5-A	Method Blank	Total/NA	Solid	8021B	34351
LCS 880-34272/1-A	Lab Control Sample	Total/NA	Solid	8021B	34272
LCS 880-34351/1-A	Lab Control Sample	Total/NA	Solid	8021B	34351
LCSD 880-34272/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34272
LCSD 880-34351/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34351
890-2883-18 MS	FS28	Total/NA	Solid	8021B	34351
890-2883-18 MSD	FS28	Total/NA	Solid	8021B	34351

Analysis Batch: 34347

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	Total BTEX	
390-2883-2	FS07	Total/NA	Solid	Total BTEX	
390-2883-3	FS13	Total/NA	Solid	Total BTEX	
890-2883-4	FS14	Total/NA	Solid	Total BTEX	
390-2883-5	FS15	Total/NA	Solid	Total BTEX	
390-2883-6	FS16	Total/NA	Solid	Total BTEX	
390-2883-7	FS17	Total/NA	Solid	Total BTEX	
390-2883-8	FS18	Total/NA	Solid	Total BTEX	
390-2883-9	FS19	Total/NA	Solid	Total BTEX	
390-2883-10	FS20	Total/NA	Solid	Total BTEX	
390-2883-11	FS21	Total/NA	Solid	Total BTEX	
890-2883-12	FS22	Total/NA	Solid	Total BTEX	
390-2883-13	FS23	Total/NA	Solid	Total BTEX	
390-2883-14	FS24	Total/NA	Solid	Total BTEX	
390-2883-15	FS25	Total/NA	Solid	Total BTEX	

Client: Ensolum

Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC VOA (Continued)

Analysis Batch: 34347 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-16	FS26	Total/NA	Solid	Total BTEX	
890-2883-17	FS27	Total/NA	Solid	Total BTEX	
890-2883-18	FS28	Total/NA	Solid	Total BTEX	

Prep Batch: 34351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-8	FS18	Total/NA	Solid	5035	
890-2883-9	FS19	Total/NA	Solid	5035	
890-2883-18	FS28	Total/NA	Solid	5035	
MB 880-34351/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34351/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34351/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2883-18 MS	FS28	Total/NA	Solid	5035	
890-2883-18 MSD	FS28	Total/NA	Solid	5035	

GC Semi VOA

Analysis Batch: 33972

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	8015B NM	33980
890-2883-2	FS07	Total/NA	Solid	8015B NM	33980
890-2883-3	FS13	Total/NA	Solid	8015B NM	33980
890-2883-4	FS14	Total/NA	Solid	8015B NM	33980
890-2883-5	FS15	Total/NA	Solid	8015B NM	33980
890-2883-6	FS16	Total/NA	Solid	8015B NM	33980
890-2883-7	FS17	Total/NA	Solid	8015B NM	33980
890-2883-8	FS18	Total/NA	Solid	8015B NM	33980
890-2883-9	FS19	Total/NA	Solid	8015B NM	33980
890-2883-10	FS20	Total/NA	Solid	8015B NM	33980
890-2883-11	FS21	Total/NA	Solid	8015B NM	33980
890-2883-12	FS22	Total/NA	Solid	8015B NM	33980
890-2883-13	FS23	Total/NA	Solid	8015B NM	33980
890-2883-14	FS24	Total/NA	Solid	8015B NM	33980
890-2883-15	FS25	Total/NA	Solid	8015B NM	33980
890-2883-16	FS26	Total/NA	Solid	8015B NM	33980
890-2883-17	FS27	Total/NA	Solid	8015B NM	33980
890-2883-18	FS28	Total/NA	Solid	8015B NM	33980
MB 880-33980/1-A	Method Blank	Total/NA	Solid	8015B NM	33980
LCS 880-33980/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33980
LCSD 880-33980/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33980
890-2883-1 MS	FS06	Total/NA	Solid	8015B NM	33980
890-2883-1 MSD	FS06	Total/NA	Solid	8015B NM	33980

Prep Batch: 33980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	8015NM Prep	
890-2883-2	FS07	Total/NA	Solid	8015NM Prep	
890-2883-3	FS13	Total/NA	Solid	8015NM Prep	
890-2883-4	FS14	Total/NA	Solid	8015NM Prep	
890-2883-5	FS15	Total/NA	Solid	8015NM Prep	
890-2883-6	FS16	Total/NA	Solid	8015NM Prep	

Client: Ensolum Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

GC Semi VOA (Continued)

Prep Batch: 33980 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2883-7	FS17	Total/NA	Solid	8015NM Prep	
890-2883-8	FS18	Total/NA	Solid	8015NM Prep	
890-2883-9	FS19	Total/NA	Solid	8015NM Prep	
890-2883-10	FS20	Total/NA	Solid	8015NM Prep	
890-2883-11	FS21	Total/NA	Solid	8015NM Prep	
890-2883-12	FS22	Total/NA	Solid	8015NM Prep	
890-2883-13	FS23	Total/NA	Solid	8015NM Prep	
890-2883-14	FS24	Total/NA	Solid	8015NM Prep	
890-2883-15	FS25	Total/NA	Solid	8015NM Prep	
890-2883-16	FS26	Total/NA	Solid	8015NM Prep	
890-2883-17	FS27	Total/NA	Solid	8015NM Prep	
890-2883-18	FS28	Total/NA	Solid	8015NM Prep	
MB 880-33980/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33980/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33980/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2883-1 MS	FS06	Total/NA	Solid	8015NM Prep	
890-2883-1 MSD	FS06	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34097

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Total/NA	Solid	8015 NM	
890-2883-2	FS07	Total/NA	Solid	8015 NM	
890-2883-3	FS13	Total/NA	Solid	8015 NM	
890-2883-4	FS14	Total/NA	Solid	8015 NM	
890-2883-5	FS15	Total/NA	Solid	8015 NM	
890-2883-6	FS16	Total/NA	Solid	8015 NM	
890-2883-7	FS17	Total/NA	Solid	8015 NM	
890-2883-8	FS18	Total/NA	Solid	8015 NM	
890-2883-9	FS19	Total/NA	Solid	8015 NM	
890-2883-10	FS20	Total/NA	Solid	8015 NM	
890-2883-11	FS21	Total/NA	Solid	8015 NM	
890-2883-12	FS22	Total/NA	Solid	8015 NM	
890-2883-13	FS23	Total/NA	Solid	8015 NM	
890-2883-14	FS24	Total/NA	Solid	8015 NM	
890-2883-15	FS25	Total/NA	Solid	8015 NM	
890-2883-16	FS26	Total/NA	Solid	8015 NM	
890-2883-17	FS27	Total/NA	Solid	8015 NM	
890-2883-18	FS28	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Soluble	Solid	DI Leach	
890-2883-2	FS07	Soluble	Solid	DI Leach	
890-2883-3	FS13	Soluble	Solid	DI Leach	
890-2883-4	FS14	Soluble	Solid	DI Leach	
890-2883-5	FS15	Soluble	Solid	DI Leach	
890-2883-6	FS16	Soluble	Solid	DI Leach	
890-2883-7	FS17	Soluble	Solid	DI Leach	
890-2883-8	FS18	Soluble	Solid	DI Leach	

 Client: Ensolum
 Job ID: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

HPLC/IC (Continued)

Leach Batch: 33839 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-9	FS19	Soluble	Solid	DI Leach	
890-2883-10	FS20	Soluble	Solid	DI Leach	
890-2883-11	FS21	Soluble	Solid	DI Leach	
890-2883-12	FS22	Soluble	Solid	DI Leach	
890-2883-13	FS23	Soluble	Solid	DI Leach	
890-2883-14	FS24	Soluble	Solid	DI Leach	
890-2883-15	FS25	Soluble	Solid	DI Leach	
890-2883-16	FS26	Soluble	Solid	DI Leach	
890-2883-17	FS27	Soluble	Solid	DI Leach	
890-2883-18	FS28	Soluble	Solid	DI Leach	
MB 880-33839/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33839/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33839/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2883-1 MS	FS06	Soluble	Solid	DI Leach	
890-2883-1 MSD	FS06	Soluble	Solid	DI Leach	
890-2883-11 MS	FS21	Soluble	Solid	DI Leach	
890-2883-11 MSD	FS21	Soluble	Solid	DI Leach	

Analysis Batch: 34019

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2883-1	FS06	Soluble	Solid	300.0	33839
890-2883-2	FS07	Soluble	Solid	300.0	33839
890-2883-3	FS13	Soluble	Solid	300.0	33839
890-2883-4	FS14	Soluble	Solid	300.0	33839
890-2883-5	FS15	Soluble	Solid	300.0	33839
890-2883-6	FS16	Soluble	Solid	300.0	33839
890-2883-7	FS17	Soluble	Solid	300.0	33839
890-2883-8	FS18	Soluble	Solid	300.0	33839
890-2883-9	FS19	Soluble	Solid	300.0	33839
890-2883-10	FS20	Soluble	Solid	300.0	33839
890-2883-11	FS21	Soluble	Solid	300.0	33839
890-2883-12	FS22	Soluble	Solid	300.0	33839
890-2883-13	FS23	Soluble	Solid	300.0	33839
890-2883-14	FS24	Soluble	Solid	300.0	33839
890-2883-15	FS25	Soluble	Solid	300.0	33839
890-2883-16	FS26	Soluble	Solid	300.0	33839
890-2883-17	FS27	Soluble	Solid	300.0	33839
890-2883-18	FS28	Soluble	Solid	300.0	33839
MB 880-33839/1-A	Method Blank	Soluble	Solid	300.0	33839
LCS 880-33839/2-A	Lab Control Sample	Soluble	Solid	300.0	33839
LCSD 880-33839/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33839
890-2883-1 MS	FS06	Soluble	Solid	300.0	33839
890-2883-1 MSD	FS06	Soluble	Solid	300.0	33839
890-2883-11 MS	FS21	Soluble	Solid	300.0	33839
890-2883-11 MSD	FS21	Soluble	Solid	300.0	33839

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Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1 SDG: 03E1558048

Client Sample ID: FS06

Date Collected: 09/02/22 09:00 Date Received: 09/02/22 14:56

Lab Sample ID: 890-2883-1

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			4.97 g	5 mL	34272	09/12/22 10:28	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/14/22 05:19	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 10:53	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 05:13	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-2883-2

Date Collected: 09/02/22 09:10 Date Received: 09/02/22 14:56

Matrix: Solid

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.98 g 5 mL 34272 09/12/22 10:28 EL EET MID Total/NA 8021B 5 mL **EET MID** Analysis 1 5 mL 34340 09/14/22 05:40 AJ Total/NA Total BTEX 34347 09/13/22 08:36 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 34097 09/09/22 11:30 **EET MID** Total/NA 33980 Prep 8015NM Prep 10.04 g 10 mL 09/08/22 08:49 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 33972 09/08/22 11:56 ΑJ **EET MID** Soluble 33839 09/06/22 12:39 KS Leach DI Leach 4.99 g 50 mL **EET MID** Soluble Analysis 300.0 50 mL 50 mL 34019 09/09/22 05:27 СН **EET MID**

Client Sample ID: FS13

Date Collected: 09/02/22 09:20 Date Received: 09/02/22 14:56

Lab Sample ID: 890-2883-3

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			4.99 g	5 mL	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/13/22 00:21	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.05 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 12:17	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 05:32	CH	EET MID

Client Sample ID: FS14

Date Collected: 09/02/22 09:30

Date Received: 09/02/22 14:56

Lab Sample ID: 890-2883-4

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			4.97 g	5 mL	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/13/22 00:41	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

Client Sample ID: FS14

Date Collected: 09/02/22 09:30 Date Received: 09/02/22 14:56 Lab Sample ID: 890-2883-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 12:37	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 05:37	CH	EET MID

Client Sample ID: FS15 Lab Sample ID: 890-2883-5

Date Collected: 09/02/22 09:40

Date Received: 09/02/22 14:56

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			5.02 g	5 mL	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/13/22 02:44	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 12:58	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 05:42	CH	EET MID

Client Sample ID: FS16 Lab Sample ID: 890-2883-6

Date Collected: 09/02/22 09:50 Date Received: 09/02/22 14:56 **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			5.01 g	5 mL	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/13/22 03:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 13:19	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 05:57	CH	EET MID

Client Sample ID: FS17 Lab Sample ID: 890-2883-7

Date Col Date Re

ollected: 09/02/22 10:00	Matrix: Solid
eceived: 09/02/22 14:56	

	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	34295	09/12/22 13:31	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34173	09/13/22 03:25	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 13:40	AJ	EET MID

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Released to Imaging: 12/13/2022 2:43:30 PM

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1 SDG: 03E1558048

Client Sample ID: FS17

Date Collected: 09/02/22 10:00 Date Received: 09/02/22 14:56

Lab Sample ID: 890-2883-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.02 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:01	CH	EET MID

Client Sample ID: FS18 Lab Sample ID: 890-2883-8

Date Collected: 09/02/22 10:10 Date Received: 09/02/22 14:56

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	34351	09/13/22 09:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/13/22 11:55	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 14:00	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:06	CH	EET MID

Client Sample ID: FS19 Lab Sample ID: 890-2883-9

Date Collected: 09/02/22 10:20 Date Received: 09/02/22 14:56

Matrix: Solid

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			5.04 g	5 mL	34351	09/13/22 09:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/13/22 12:15	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 14:22	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:12	CH	EET MID

Client Sample ID: FS20 Lab Sample ID: 890-2883-10

Date Collected: 09/02/22 10:30 Date Received: 09/02/22 14:56

Soluble

Batch Dil Initial Final Batch Batch Prepared Prep Type Method Run Factor Amount Amount Number or Analyzed Analyst Type Lab 5035 34296 Total/NA Prep 5.02 g 5 mL 09/12/22 13:37 MR **EET MID** Total/NA Analysis 8021B 1 5 mL 5 mL 34301 09/13/22 01:51 MR **EET MID** Total/NA Total BTEX Analysis 34347 09/13/22 08:36 ΑJ EET MID Total/NA Analysis 8015 NM 34097 09/09/22 11:30 AJ **EET MID** Prep Total/NA 8015NM Prep 10.03 g 10 mL 33980 09/08/22 08:49 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 33972 09/08/22 14:42 AJ **EET MID** Soluble 50 mL Leach DI Leach 5.01 g 33839 09/06/22 12:39 KS **EET MID**

50 mL

50 mL

34019

09/09/22 06:17

CH

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EET MID

Analysis

300.0

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

Client Sample ID: FS21 Lab Sample ID: 890-2883-11

Matrix: Solid

Date Collected: 09/02/22 10:40 Date Received: 09/02/22 14:56

	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	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 02:11	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 15:24	AJ	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:21	CH	EET MID

Client Sample ID: FS22 Lab Sample ID: 890-2883-12 **Matrix: Solid**

Date Collected: 09/02/22 10:50

Date Received: 09/02/22 14:56

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.97 g 5 mL 34296 09/12/22 13:37 MR EET MID Total/NA 8021B 5 mL 09/13/22 02:31 **EET MID** Analysis 1 5 mL 34301 MR Total/NA Total BTEX 34347 09/13/22 08:36 Analysis 1 A.I **EET MID** Total/NA Analysis 8015 NM 34097 09/09/22 11:30 **EET MID** Total/NA 33980 Prep 8015NM Prep 10.02 g 10 mL 09/08/22 08:49 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 33972 09/08/22 15:45 ΑJ **EET MID** Soluble 33839 09/06/22 12:39 KS Leach DI Leach 4.96 g 50 mL **EET MID**

Lab Sample ID: 890-2883-13 **Client Sample ID: FS23** Date Collected: 09/02/22 11:00 **Matrix: Solid**

50 mL

50 mL

34019

09/09/22 06:36

СН

Date Received: 09/02/22 14:56

Analysis

300.0

Soluble

	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	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 02:52	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 16:06	AJ	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:41	CH	EET MIC

Client Sample ID: FS24 Lab Sample ID: 890-2883-14 Date Collected: 09/02/22 11:10

Date Received: 09/02/22 14:56

	Batch	Batch	tch	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	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 03:12	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID

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EET MID

Matrix: Solid

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

Client Sample ID: FS24

Date Collected: 09/02/22 11:10 Date Received: 09/02/22 14:56 Lab Sample ID: 890-2883-14

Matrix: Solid

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			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 16:27	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 06:55	CH	EET MID

Client Sample ID: FS25 Lab Sample ID: 890-2883-15

Date Collected: 09/02/22 11:20

Date Received: 09/02/22 14:56

	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	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 03:33	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 16:48	AJ	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 07:00	CH	EET MID

Client Sample ID: FS26 Lab Sample ID: 890-2883-16

Date Collected: 09/02/22 11:30 Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 03:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 17:09	AJ	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 07:05	CH	EET MID

Lab Sample ID: 890-2883-17 **Client Sample ID: FS27**

Date Collected: 09/02/22 11:40 Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34296	09/12/22 13:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34301	09/13/22 04:13	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 17:30	AJ	EET MID

Eurofins Carlsbad

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Matrix: Solid

Matrix: Solid

Job ID: 890-2883-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS27 Lab Sample ID: 890-2883-17

Date Collected: 09/02/22 11:40 Matrix: Solid Date Received: 09/02/22 14:56

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			4.98 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 07:10	CH	EET MID

Client Sample ID: FS28 Lab Sample ID: 890-2883-18

Date Collected: 09/02/22 11:50 **Matrix: Solid**

Date Received: 09/02/22 14:56

	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	34351	09/13/22 09:09	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34340	09/13/22 11:34	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			34347	09/13/22 08:36	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34097	09/09/22 11:30	AJ	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33980	09/08/22 08:49	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33972	09/08/22 17:50	AJ	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33839	09/06/22 12:39	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	34019	09/09/22 07:15	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: 890-2883-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2883-1

SDG: 03E1558048

boratory	
boratory	
TMID	
T MID	

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

890-2883-17

890-2883-18

Project/Site: PLU 21 BD 104H, 123H, 124H

FS27

FS28

Job ID: 890-2883-1 SDG: 03E1558048

Lab Sample ID Client Sample ID Matrix Collected Received Depth 890-2883-1 FS06 Solid 09/02/22 09:00 09/02/22 14:56 3' 890-2883-2 09/02/22 14:56 3' FS07 Solid 09/02/22 09:10 890-2883-3 FS13 Solid 09/02/22 09:20 09/02/22 14:56 3' 890-2883-4 FS14 Solid 09/02/22 09:30 09/02/22 14:56 3' 890-2883-5 FS15 Solid 09/02/22 09:40 09/02/22 14:56 2' 890-2883-6 FS16 Solid 09/02/22 09:50 09/02/22 14:56 2' FS17 Solid 09/02/22 14:56 2 890-2883-7 09/02/22 10:00 890-2883-8 FS18 Solid 09/02/22 10:10 09/02/22 14:56 890-2883-9 FS19 Solid 09/02/22 10:20 09/02/22 14:56 3' 09/02/22 10:30 2 890-2883-10 FS20 Solid 09/02/22 14:56 890-2883-11 FS21 Solid 09/02/22 10:40 09/02/22 14:56 890-2883-12 FS22 Solid 09/02/22 10:50 09/02/22 14:56 2' 890-2883-13 FS23 Solid 09/02/22 11:00 09/02/22 14:56 2' FS24 Solid 09/02/22 14:56 2' 890-2883-14 09/02/22 11:10 890-2883-15 FS25 Solid 09/02/22 11:20 09/02/22 14:56 2' FS26 890-2883-16 Solid 09/02/22 11:30 09/02/22 14:56 2'

Solid

Solid

09/02/22 11:40

09/02/22 11:50

09/02/22 14:56

09/02/22 14:56

2'

2'

3

4

6

8

9

10

12

Circle Method(s) and Metal(s) to be analyzed

otal 200.7 / 6010

200.8 / 6020

8RCRA 13PPM

Texas 11

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дS dS S

æ As Ba Ва

Be B

Cd Cr Co Q Ca Q

Cu Pb ၀

Mn Mo Ni Se Ag TI U

ctors. It assigns standard terms and conditions

5

Fe

В Μg

Mn Mo Ni K Se

Ag SiO₂ Na Sr

TI Sn U V

Z

Incident Number: nAPP2209736479(104H), nAPP2211651017(123H), nAPP2211151438(124H)

Hg: 1631 / 245.1 / 7470 / 7471

FS20 FS19

SS

9.2.22

10:20

Comp

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9.2.22

10:30

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Comp

FS17

9.2.22 9.2.22 9.2.22 9.2.22 9.2.22 9.2.22

10:00

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Comp

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9:50 9:40 9:30

Comp Comp

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1040

FS15

FS16

FS13

9:20 9:10 9:00

Comp

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FS14

FS07 FS06

otice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontra

TCLP / SPLP 6010: 8RCRA

eurofins

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

Work Order No:
www.xenco.com Page 1 of 2
omr
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II
Deliverables: EDD
UEST Preservative Codes

6	1
EXPI EE/C/A Fitter agreement	abino
Signature) Received by: (Signature)	Relinguished by: (Signature)
Received by: (Signa	

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NaOH+Ascorbic Acid: SAPC

Sample Comments

Cost Center: 1666351001

Zn Acetate+NaOH: Zn Na₂S₂O₃: NaSO₃ SAMPLE RECEIPT

Temp Blank: Yes

Yes No

Werte

Yes

S

H2S04: H2 HCL: HC

Cool: Coo None: NO

HNO3: HN MeOH: Me

DI Water: H₂O

NaOH: Na

NaHSO₄: NABIS H3PO4: HP

Parameters

8

Thermorneter ID:

Samples Received Intact:

Cooler Custody Seals: imple Custody Seals:

Yes

Temperature Reading Correction Factor:

CHLORIDES (EPA: 300.0)

890-2883 Chain of Custody

Corrected Temperature:

Yes

8 No

NA NA

otal Containers:

Sample Identification

Matrix

Sampled

Sampled

Date

Time

Depth

Grab/

Of

TPH (8015)

BTEX (8021

Comp

Cont

9.2.22

Sampler's Name:

Project Location:

EDDY COUNTY, NM

Due Date: Routine

5 day TAT

the lab, if received by 4:30pm TAT starts the day received by

Gilbert Moreno

Project Number:

Project Name:

PLU 21 BD 104H, 123H, 124H

03E1558048

Phone:

City, State ZIP:

Carlsbad, NM 88220 3122 National parks Hwy

Email:

bbelill@ensolum.com

City, State ZIP:

Carlsbad, NM 88220 3104 E. Green Street XTO Energy, Inc. Garrett Green

Company Name: Bill to: (if different)

Turn Around

ANALYSIS REQUE

☐ Rush

Code

Company Name: Project Manager:

Ensolum, LLC Ben Belill

City, State ZIP: Address: Company Name: Project Manager:

3122 National parks Hwy

Carlsbad, NM 88220

City, State ZIP:

Carlsbad, NM 88220 3104 E. Green Street XTO Energy, Inc. Garrett Green

Company Name: Bill to: (if different)

Address:

Ben Belill

Ensolum, LLC

Chain of Custody

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

Work Order No:
www.xenco.com Page 2 of 2
Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II
Deliverables: EDD ☐ ADaPT ☐ Other:

i light.	7090400606		Ellian.	Cilian. Duenille el labiditi.com	JIUIII.	1				l		L	Γ							
Project Name:	PLU 21 BD 10	PLU 21 BD 104H, 123H, 124H		Turn Around							ANALYSIS		REQUEST	7					Preser	Preservative Codes
Project Number:	03E1	03E1558048	☑ Routine	Rush	Code	ē .								_		-		_	None: NO	DI Water: H ₂ O
Project Location:	EDDY CO	EDDY COUNTY, NM	Due Date:	5 day TAT	-														Cool: Cool	MeOH: Me
Sampler's Name:	Gilber	Gilbert Moreno	TAT starts the	TAT starts the day received by	¥	-	+				_	+	_	+			+		HCL: HC	HNO ₃ : HN
PO#			the lab, if rec	the lab, if received by 4:30pm	-							-			_		-		H ₂ S0 ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	ank: Yes No	o Wet ice:	ON SEL	nete	.0)													H ₃ PO ₄ : HP	
Samples Received Intact:		크	eter ID:	720	ran	300.						_							NaHSO ₄ : NABIS	BIS
Cooler Custody Seals:	Yes No	NIA Correction Factor:	Factor:	3.0.	Pa	PA:						_						_	Na ₂ S ₂ O ₃ : NaSO ₃	SO ₃
Sample Custody Seals:		N/A Temperate	Temperature Reading:	4.5) (El						_					-		Zn Acetate+NaOH: Zn	VaOH: Zn
Total Containers:		Corrected	Corrected Temperature:	53	L	IDES	+	3021				_						-	NaOH+Ascor	NaOH+Ascorbic Acid: SAPC
Sample Identification		Matrix Sampled	Time d Sampled	Depth Comp	b/ # of	라 즉 CHLOR	TPH (80	BTEX (Sampl	Sample Comments
FS21		S 9.2.22	10:40	2' Comp	ηρ 1	×	×	×											Cost Cen	Cost Center: 1666351001
FS22		S 9.2.22	10:50	2' Comp	np 1	×	×	×				-	-					-		
FS23		S 9.2.22	11:00	2' Comp	ਰ 1	×	×	×				_			\vdash			\vdash		
FS24		S 9.2.22	11:10	2' Comp	np 1	×	×	×												
FS25		S 9.2.22	11:20	2' Comp	ъ 1	×	×	×				_		\vdash			\vdash	-		
FS26		S 9.2.22	11:30	2' Comp	ا	×	×	×					\vdash			\vdash		-	nappoon	Incident Number:
FS27		S 9.2.22	11:40	2' Comp	ਰ 1	×	×	×						-				-	nAPP221	nAPP2211651017(123H).
F328		\$ 9.2.22	11:50	2" Comp	귤	×	×	×			Ц	H		\vdash		\vdash	H	-	nAPP22	nAPP2211151438(124H)
			19ers									-		1	H	\parallel	\parallel	H		
		1				-	H					-					$\ -$	-		
Total 200.7 / 6010	0 200.8 / 6020:)20:	8RCRA 13PPM	PM Texas 11	11 A	Sb A	Sb As Ba Be	8	Cd Ca	Cr Co		Cu Fe Pb	Pb Mg Mn Mo Ni K	Mn M	0 <u>Z</u>	K Se	ð	Ag SiO ₂ Na	Na Sr TI Sn U	UVZn
Circle Method(s) and Metal(s) to be analyzed	Metal(s) to be	analyzed	TCLP / S	CLP / SPLP 6010: 8RCRA	RCR	Sb	Sb As Ba Be Cd Cr Co Cu Pb Mn N	Ве	δ. g	C0 C	u Pb	Mn Mo	No Ni Se Ag TI U	e Ag	I C		포	163	Hg: 1631 / 245.1 / 7470	0 /7471
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from cilent 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 cilent if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$86.00 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.	cument and relingui will be liable only fo um charge of \$85.0	ishment of samples on the cost of samples of will be applied to ea	onstitutes a valid po and shall not assu- ach project and a ch	irchase order fro me any responsil arge of \$5 for eac	m client bility for ch samp	compar any lossi le subm	ny to Eur ses or ex litted to E	ofins Xen Denses ir Denses ir	co, its at curred t enco, bu	fillates a by the cli t not an	nd subc ent if su alyzed. T	ontractors ch losses a	ors. It assigns standard terms and conditions es are due to circumstances beyond the contro	ins stan o circum enforce	dard te nstance d unless	rms an s beyor s previo	d condi	tions ontrol gotiate	ed.	
Relinquished by: (Signature)	(Signature)	Recei	Received by: (Signature)	ure)		Dat	Date/Time		Re	Relinquished by: (Sig	hed by	/: (Signa	nature)		Re	ceive	by:	Signa	Received by: (Signature)	Date/Time
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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2883-1 SDG Number: 03E1558048

Login Number: 2883 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	

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2883-1 SDG Number: 03E1558048

List Source: Eurofins Midland

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 2883

List Creation: 09/07/22 11:42 AM

Question	Answer	Comment
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
s 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 c6mm (1/4").	N/A	

Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 12/13/2022 2:43:30 PM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2984-1

Laboratory Sample Delivery Group: 03E1558048 Client Project/Site: PLU 21 BD 104H, 123H, 124H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/20/2022 11:34:05 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

 Client: Ensolum
 Laboratory Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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Definitions/Glossary

Job ID: 890-2984-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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**

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

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation These commonly used abbreviations may or may not be present in this report.

¤ Listed under the "D" column to designate that the result is reported on a dry weight basis

%R Percent Recovery CFL Contains Free Liquid CFU Colony Forming Unit Contains No Free Liquid **CNF**

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

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)

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

MOI Method Quantitation Limit

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit **PQL**

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2984-1

SDG: 03E1558048

Job ID: 890-2984-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2984-1

Receipt

The sample was received on 9/15/2022 3:27 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 15.8°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34689 and analytical batch 880-34832 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.

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-34747/2-A) and (LCSD 880-34747/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: The method blank for preparation batch 880-34747 and analytical batch 880-34755 contained Gasoline Range Organics (GRO)-C6-C10 and OII Range Organics (Over C28-C36) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2984-1

Job ID: 890-2984-1

Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

Client Sample ID: FS18

Date Collected: 09/15/22 13:35 Date Received: 09/15/22 15:27

Sample Depth: 2'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U F1	0.00200	mg/Kg		09/19/22 12:00	09/19/22 17:53	-
Toluene	<0.00200	U F2 F1	0.00200	mg/Kg		09/19/22 12:00	09/19/22 17:53	
Ethylbenzene	<0.00200	U F2 F1	0.00200	mg/Kg		09/19/22 12:00	09/19/22 17:53	
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.00399	mg/Kg		09/19/22 12:00	09/19/22 17:53	
o-Xylene	<0.00200	U F2 F1	0.00200	mg/Kg		09/19/22 12:00	09/19/22 17:53	
Xylenes, Total	<0.00399	U F2 F1	0.00399	mg/Kg		09/19/22 12:00	09/19/22 17:53	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	103		70 - 130			09/19/22 12:00	09/19/22 17:53	
1,4-Difluorobenzene (Surr)	108		70 - 130			09/19/22 12:00	09/19/22 17:53	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/20/22 09:48	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			09/20/22 09:06	
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/19/22 08:27	09/19/22 13:08	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/19/22 08:27	09/19/22 13:08	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:27	09/19/22 13:08	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	88		70 - 130			09/19/22 08:27	09/19/22 13:08	
o-Terphenyl	93		70 - 130			09/19/22 08:27	09/19/22 13:08	
Method: 300.0 - Anions, Ion Chro								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	237		4.97	mg/Kg			09/19/22 17:29	

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Red
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2984-1	FS18	103	108	
890-2984-1 MS	FS18	112	103	
890-2984-1 MSD	FS18	66 S1-	112	
LCS 880-34689/1-A	Lab Control Sample	105	100	
LCSD 880-34689/2-A	Lab Control Sample Dup	102	103	
MB 880-34689/5-B	Method Blank	101	117	
Surrogate Legend				
BFB = 4-Bromofluorobenze	ene (Surr)			
DFBZ = 1,4-Difluorobenzer	ne (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)
890-2984-1	FS18	88	93
890-2984-1 MS	FS18	84	78
890-2984-1 MSD	FS18	84	78
LCS 880-34747/2-A	Lab Control Sample	166 S1+	176 S1+
LCSD 880-34747/3-A	Lab Control Sample Dup	186 S1+	200 S1+
MB 880-34747/1-A	Method Blank	91	98

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2984-1 SDG: 03E1558048

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34689/5-B

Matrix: Solid Analysis Batch: 34832 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34689

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/16/22 15:45	09/19/22 17:24	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/16/22 15:45	09/19/22 17:24	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/16/22 15:45	09/19/22 17:24	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/16/22 15:45	09/19/22 17:24	1

09/19/22 17:24

Qualifier %Recovery Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 101 09/16/22 15:45 09/19/22 17:24 4-Bromofluorobenzene (Surr) 70 - 130 09/16/22 15:45 1,4-Difluorobenzene (Surr) 117

Lab Sample ID: LCS 880-34689/1-A

MB MB

Matrix: Solid

Analysis Batch: 34832

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

Prep Batch: 34689

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.09148 mg/Kg 91 70 - 130 Toluene 0.100 0.09608 mg/Kg 96 70 - 130 Ethylbenzene 0.100 0.09681 mg/Kg 97 70 - 130 0.200 102 70 - 130 m-Xylene & p-Xylene 0.2046 mg/Kg 0.100 o-Xylene 0.1027 mg/Kg 103 70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	105	70 - 130
1,4-Difluorobenzene (Surr)	100	70 - 130

Lab Sample ID: LCSD 880-34689/2-A

Matrix: Solid

Analysis Batch: 34832

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34689

RPD LCSD LCSD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Benzene 0.100 0.09765 mg/Kg 98 70 - 130 35 Toluene 0.100 0.09126 mg/Kg 91 70 - 130 5 35 Ethylbenzene 0.100 0.08993 mg/Kg 90 70 - 130 35 m-Xylene & p-Xylene 0.200 0.1909 mg/Kg 95 70 - 130 35 0.100 0.09752 o-Xylene mg/Kg 98 70 - 130 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	102		70 - 130
1.4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 890-2984-1 MS

Matrix: Solid

Analysis Batch: 34832

Client Sample ID: FS18 Prep Type: Total/NA

Prep Batch: 34689

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1	0.0998	0.08170		mg/Kg	_	82	70 - 130	
Toluene	<0.00200	U F2 F1	0.0998	0.07915		mg/Kg		79	70 - 130	

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QC Sample Results

 Client: Ensolum
 Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

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

Lab Sample ID: 890-2984-1 MS

Matrix: Solid

Client Sample ID: FS18

Prep Type: Total/NA

Analysis Batch: 34832 Prep Batch: 34689

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00200	U F2 F1	0.0998	0.07827		mg/Kg		78	70 - 130
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.200	0.1597		mg/Kg		80	70 - 130
o-Xylene	<0.00200	U F2 F1	0.0998	0.08156		mg/Kg		82	70 - 130

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 112
 70 - 130

 1,4-Difluorobenzene (Surr)
 103
 70 - 130

Lab Sample ID: 890-2984-1 MSD

Matrix: Solid

Client Sample ID: FS18

Prep Type: Total/NA

Analysis Batch: 34832

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U F1	0.100	0.06928	F1	mg/Kg		69	70 - 130	16	35
Toluene	<0.00200	U F2 F1	0.100	0.05454	F2 F1	mg/Kg		54	70 - 130	37	35
Ethylbenzene	<0.00200	U F2 F1	0.100	0.05045	F2 F1	mg/Kg		50	70 - 130	43	35
m-Xylene & p-Xylene	<0.00399	U F2 F1	0.201	0.1004	F2 F1	mg/Kg		50	70 - 130	46	35
o-Xylene	<0.00200	U F2 F1	0.100	0.05598	F2 F1	mg/Kg		56	70 - 130	37	35

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 66
 S1 70 - 130

 1,4-Difluorobenzene (Surr)
 112
 70 - 130

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

Lab Sample ID: MB 880-34747/1-A

Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 34755

Prep Batch: 34747

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	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/19/22 08:27	09/19/22 12:04	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/19/22 08:27	09/19/22 12:04	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/19/22 08:27	09/19/22 12:04	1

MB MB %Recovery Dil Fac Surrogate Qualifier Limits Prepared Analyzed 70 - 130 09/19/22 08:27 1-Chlorooctane 91 09/19/22 12:04 70 - 130 09/19/22 08:27 09/19/22 12:04 o-Terphenyl 98

o-Terphenyl 98 70 - 130 09/19/22 08:27 09/19/22 12:04 1

Lab Sample ID: LCS 880-34747/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA
Analysis Batch: 34755 Prep Batch: 34747

	Spike	LCS	LCS				%Rec		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Gasoline Range Organics	1000	868.7		mg/Kg		87	70 - 130		
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	774.2		mg/Kg		77	70 - 130		
C10-C28)									

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Prep Batch: 34689

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Job ID: 890-2984-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558048

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

LCS LCS

Lab Sample ID: LCS 880-34747/2-A

Matrix: Solid

Analysis Batch: 34755

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34747

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 166 S1+ 70 - 130 o-Terphenyl 176 S1+ 70 - 130

Lab Sample ID: LCSD 880-34747/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 34755

Prep Type: Total/NA

Prep Batch: 34747

%Rec RPD

Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 920.7 92 70 - 1306 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 834.1 83 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 186 S1+ 70 - 130 1-Chlorooctane 200 S1+ 70 - 130 o-Terphenyl

Lab Sample ID: 890-2984-1 MS **Client Sample ID: FS18**

Matrix: Solid

Analysis Batch: 34755

Prep Type: Total/NA

Prep Batch: 34747

Prep Batch: 34747

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U	996	886.6		mg/Kg		87	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	996	711.5		mg/Kg		71	70 - 130	
C10-C28)										

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 84 o-Terphenyl 78 70 - 130

Lab Sample ID: 890-2984-1 MSD Client Sample ID: FS18 Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 34755

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit Gasoline Range Organics <49.9 U 999 887.2 87 mg/Kg 70 - 130 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 717.5 mg/Kg 72 70 - 130 20

C10-C28)

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 84 70 - 130 78 70 - 130 o-Terphenyl

QC Sample Results

Job ID: 890-2984-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558048

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34799/1-A Client Sample ID: Method Blank **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 34853

Analyte

Chloride

мв мв Dil Fac Result Qualifier RL Unit D Prepared Analyzed <5.00 U 5.00 mg/Kg 09/19/22 15:32

Lab Sample ID: LCS 880-34799/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34853

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 246.7 mg/Kg 99 90 - 110

Lab Sample ID: LCSD 880-34799/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid**

Prep Type: Soluble

Analysis Batch: 34853

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 247.0 mg/Kg 90 - 110

Lab Sample ID: 880-19354-A-11-C MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34853

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits Chloride 481 248 714.2 90 - 110 mg/Kg

Lab Sample ID: 880-19354-A-11-D MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34853

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 248 481 713.3 mg/Kg 94 90 - 110 0 20

Client: Ensolum

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2984-1 SDG: 03E1558048

GC VOA

Prep Batch: 34689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	5035	
MB 880-34689/5-B	Method Blank	Total/NA	Solid	5035	
LCS 880-34689/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34689/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2984-1 MS	FS18	Total/NA	Solid	5035	
890-2984-1 MSD	FS18	Total/NA	Solid	5035	

Analysis Batch: 34832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	8021B	34689
MB 880-34689/5-B	Method Blank	Total/NA	Solid	8021B	34689
LCS 880-34689/1-A	Lab Control Sample	Total/NA	Solid	8021B	34689
LCSD 880-34689/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34689
890-2984-1 MS	FS18	Total/NA	Solid	8021B	34689
890-2984-1 MSD	FS18	Total/NA	Solid	8021B	34689

Analysis Batch: 34910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34747

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	8015NM Prep	
MB 880-34747/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34747/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34747/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2984-1 MS	FS18	Total/NA	Solid	8015NM Prep	
890-2984-1 MSD	FS18	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34755

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	8015B NM	34747
MB 880-34747/1-A	Method Blank	Total/NA	Solid	8015B NM	34747
LCS 880-34747/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34747
LCSD 880-34747/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34747
890-2984-1 MS	FS18	Total/NA	Solid	8015B NM	34747
890-2984-1 MSD	FS18	Total/NA	Solid	8015B NM	34747

Analysis Batch: 34896

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Soluble	Solid	DI Leach	
MB 880-34799/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34799/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34799/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

 Client: Ensolum
 Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

HPLC/IC (Continued)

Leach Batch: 34799 (Continued)

	Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
	880-19354-A-11-C MS	Matrix Spike	Soluble	Solid	DI Leach	
L	880-19354-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34853

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2984-1	FS18	Soluble	Solid	300.0	34799
MB 880-34799/1-A	Method Blank	Soluble	Solid	300.0	34799
LCS 880-34799/2-A	Lab Control Sample	Soluble	Solid	300.0	34799
LCSD 880-34799/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34799
880-19354-A-11-C MS	Matrix Spike	Soluble	Solid	300.0	34799
880-19354-A-11-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34799

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Lab Chronicle

 Client: Ensolum
 Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Client Sample ID: FS18 Lab Sample ID: 890-2984-1

Date Collected: 09/15/22 13:35

Date Received: 09/15/22 15:27

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	34689	09/19/22 12:00	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34832	09/19/22 17:53	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34910	09/20/22 09:48	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34896	09/20/22 09:06	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34747	09/19/22 08:27	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34755	09/19/22 13:08	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34799	09/19/22 09:49	KS	EET MID
Soluble	Analysis	300.0		1			34853	09/19/22 17:29	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-2984-1

 Project/Site: PLU 21 BD 104H, 123H, 124H
 SDG: 03E1558048

Laboratory: Eurofins Midland

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

Authority	Pro	ogram	Identification Number	Expiration Date
Texas	NE	LAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	t the laboratory is not certifi	ied by the governing authority. This list ma	av include analytes for
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

Project/Site: PLU 21 BD 104H, 123H, 124H

Job ID: 890-2984-1

SDG: 03E1558048

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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 21 BD 104H, 123H, 124H

Job ID: 890-2984-1

SDG: 03E1558048

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2984-1	FS18	Solid	09/15/22 13:35	09/15/22 15:27	2'

Chain of Custody

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

Environment Testing

😍 eurofins

Work Order No:

									.,
Project Manager: Ben Belil	Selill			Bill to: (if different)		Garrett Green		Work Or	Work Order Comments
Company Name: Ensol	Ensolum, LLC		Ŭ	Company Name		XTO Energy, Inc.	Ü	Program: UST/PST ☐ PRP ☐ B	🗌 PRP 🗎 Brownfields 📗 RRC 🔲 Superfund 📙
	3122 National parks Hwy	1wy	,	Address:	310	3104 E. Green Street	Street	State of Project:	
te ZIP:	Carlsbad, NM 88220		J	City, State ZIP:	Ca	Carlsbad, NM 88220	18220	Reporting: Level II Level III PST/UST	PST/UST TRRP Level IV
	9898540852		Email: bb	obelill@ensolum.com	m.com			Deliverables: EDD	ADaPT 🗌 Other:
Project Name: PLU	PLU 21 BD 104H, 123H, 124H	23H, 124H	Turn Ar	Around			ANALYSIS REQUEST	REQUEST	Preservative Codes
::	03E1558048	18	☐ Routine	☑ Rush	Pres. Code				None: NO DI Water: H ₂ O
Project Location:	EDDY COUNTY, NM		Due Date:	24HR					-
Sampler's Name:	CONNER WHITMAN	TMAN	TAT starts the	TAT starts the day received by					
PO#:			the lab, if rece	the lab, if received by 4:30pm	SI		_	-	H ₂ S0 ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes No	Wet Ice:	Wes No	eten (0.				H₃PO₄: HP
Samples Received Intact:	(Yes No	Thermometer ID:		TOG-MI					NaHSO4: NABIS
Cooler Custody Seals:	Yes No ATTA	Correction Factor:	ctor:	-03					Na ₂ S ₂ O ₃ NaSO ₃
Sample Custody Seals:	Yes No N/A	Temperature Reading	Reading:	Coll	3) S				Zn Acetate+NaOH: Zn
Total Containers:		Corrected Temperature:	mperature:	15.8	IDE	(91	890-2984 Chain of Custody	Custody	NaOH+Ascorbic Acid: SAPC
Sample Identification	ion Matrix	Date	Time	Depth Grab/	C #	08) H91	этех (Sample Comments
8100	U	9/15/2022	_	Comp	-	×			Cost Center: 1666401001,
		120200	Π						1666411001
									neigent Number.
									nAPP2211651017,
									nAPP2211151438
Total 200.7 / 6010	200.8 / 6020:	88	BRCRA 13PPA	M Texas 11	Al Sb	As Ba Be	B Cd Ca Cr Co	Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO	Ag SiO ₂ Na Sr TI Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	tal(s) to be analy	/zed	TCLP / SPL	LP 6010: 8R	8RCRA Sb	As Ba B	Sb As Ba Be Cd Cr Co Cu Pb Mn	Cu Pb Mn Mo Ni Se Ag TI U Hg: 16	Hg: 1631 / 245.1 / 7470 / 7471
Notice: Signature of this document	nt and relinquishmen	t of samples const	titutes a valid pu	rchase order from	client compa	ny to Eurofins	Xenco, its affiliates and subcontrac	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	S
of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge	e liable only for the co harge of \$85.00 will b	ost of samples and e applied to each p	I shall not assur project and a cha	rge of \$5 for each	sy for any los sample subr	ses or expens nitted to Eurofi	es incurred by the chefit is such toos ns Xenco, but not analyzed. These t	of service. Eurofins Xenco will be lable only for the cost of samples and shall not assume any responsibility for any losses of expenses incursed by the client is such to see that the cost of sections in the sample and a charge of \$\$ for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	lated,
Relinquished by: (Signature)	nature)	Received	Received by: (Signature)	ure)	De	Date/Time	Relinquished by: (Signature)	gnature) Received by: (Signature)	gnature) Date/Time
1 / Mars	4	3		# PT	9/19/22	31 56	1527		

Eurofins Carlsbad

Chain of Custody Record

eurofins Environment Testing

Phone: 575-988-3199 Fax: 575-988-3199											
Client Information (Sub Contract Lab)	Sampler		Σ.a.	Lab PM Kramer Jessica			Carrie	Carrier Tracking No(s))(s)	COC No. 890-926 1	
Client Contact: Shipping/Receiving	Phone:			E-Mail Lessica Kramer@et eurofinsus com	Det eurofins	als com	State	State of Origin:		Page:	
Company Eurofins Environment Testing South Centr				Accreditations Requ	Accreditations Required (See note):	note):	-			Job #:	
Address 1211 W Florida Ave ,	Due Date Requested 9/16/2022					Analysis	Reguested	7		Preservation Codes	odes
City Midland	TAT Requested (days):	/s):		<u> </u>					1		M - Hexane N None O - AsNaO2
State Zip: TX 79701				ТРН						D Nitric Acid	P Na2O4S Q - Na2SO3
Phone: 432-704-5440(Tel)	PO#				e						
Email	WO#:			0),						H ASCORDIC ACID	< _
Project Name: PLU 21 BD 104H 123H 124H	Project #: 89000093			s or N						ᆫᅩ	W pH 4-5 Y Trizma
Site:	SSOW#:			D (Ye						Control Other	c - oniei (specily)
		6	Sample Matrix	MS/MS	-M_28D					nber o	
mple Identification - Client ID (1 ab ID)	Sample Date	()		ield Filt erform	015MOD 00_ORGI 021B/503	otal_BTE				otal Nur	
	Campie Date		Preservation Code:	X F	3(\$20 77		1		Ì	Special Instructions/Note:
FS18 (890-2984-1)	9/15/22	13 35 Mountain	Solid	×	× ×	×			Comp. M. Guetan	<u> </u>	
										6 -7,1	
											and the second s
								-		777	
Note: Since laboratory accreditations are subject to change, Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed the samples must be shipped back to the Eurofins Environment Testing South Central LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central LLC attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central LLC.	nt Testing South Centra cove for analysis/tests/r entral LLC attention imn	l, LLC places the natrix being analy nediately If all re	ownership of method a zed the samples must equested accreditations	inalyte & accredita be shipped back are current to dat	ation compliand to the Eurofins e, return the sign	e upon out su Environment T Ined Chain of	bcontract lat Testing Sout Custody atte	oratories TI Central LLo sting to said	is sample shi claboratory or complicance t	pment is forwarded unde r other instructions will b o Eurofins Environment	er chain-of-custody If the e provided Any changes to Testing South Central LLC.
Possible Hazard Identification Unconfirmed				Sample	Sample Disposal (A f		be asses	sed if san	ples are r	fee may be assessed if samples are retained longer than 1 month)	n 1 month)
Deliverable Requested I II III IV Other (specify)	Primary Deliverable Rank. 2	ble Rank. 2		Special	Special Instructions/QC Requirements	/QC Requir	ements	ents		MICHINETON	MOnths
Empty Kit Relinquished by		Date		Time /		•		Method of Shipment:	ipment:		
Relinquished by	Date/Time [.]		Company	≋ec.	S T		4		Date/Time		Company
Relinquished by	Date/Time		Company	Red	wed by				Date/Time:		Company
Relinquished by	Date/Time:		Company	Rece	Received by	-			Date/Time:		Company
Custody Seals Intact: Custody Seal No				Coole	Cooler Temperature(s	\sim	°C and Other Remarks.				

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2984-1

SDG Number: 03E1558048

Login Number: 2984 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

31 UJ 200

<6mm (1/4").

Containers requiring zero headspace have no headspace or bubble is

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2984-1

SDG Number: 03E1558048

List Source: Eurofins Midland List Creation: 09/19/22 08:28 AM

List Number: 2 Creator: Teel, Brianna

Login Number: 2984

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. True

True

True

1

2

4

5

7

9

11

4.0

14

MS/MSDs

<6mm (1/4").

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is



APPENDIX E

NMOCD Notifications

From: Green, Garrett J

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us; Hamlet, Robert, EMNRD

Cc: Tacoma Morrissey

Subject: XTO - Sampling Notification (Week of 8/29/22 - 9/2/22)

Date: Friday, August 26, 2022 3:15:37 PM

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of August 29, 2022.

Monday

- Brushy Draw West 25 / nAPP2216138431
- Big Sinks 2-24-30 / nAPP2219644709 & nAPP2220224382

Tuesday

- Brushy Draw West 25 / nAPP2216138431
- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- ADU 816/ NAB1435334641

Wednesday

- Brushy Draw West 25 / nAPP2216138431
- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- ADU 816/ NAB1435334641
- PLU Pierce Canyon 12 / nAPP2222044186

Thursday

- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- JRU DI2/ nAPP2211654411 & nAPP2208349430

Friday

- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- PLU S Frac Pond / nAPP2211150068

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:
 Collins, Melanie

 To:
 DelawareSpills /SM

 Cc:
 Aimee Cole; Ben Belill

Subject: FW: (Extension Approval) - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379, nAPP2210942764,

nAPP221651017, nAPP2211151438

Date: Thursday, June 23, 2022 4:38:46 PM

Attachments: <u>image002.png</u>

[**EXTERNAL EMAIL**]

From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]

Sent: Thursday, June 23, 2022 3:27 PM

To: Collins, Melanie <melanie.collins@exxonmobil.com>

Subject: (Extension Approval) - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379,

nAPP2210942764, nAPP221651017, nAPP2211151438

External Email - Think Before You Click

RE: Incident #NAPP2209736479, NAPP2210942764, NAPP221651017, NAPP2211151438

Melanie,

Your request for an extension to **September 21st, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

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



From: Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Thursday, June 23, 2022 2:15 PM

To: Hamlet, Robert, EMNRD < Robert.Hamlet@state.nm.us>

Subject: RE: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

My apologies for that. The correct incident number for the 3/25/2022 spill should be nAPP2209736479.

Thank you, Melanie Collins

From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]

Sent: Thursday, June 23, 2022 3:11 PM

To: Collins, Melanie < <u>melanie.collins@exxonmobil.com</u> >

Subject: RE: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

External Email - Think Before You Click

Melanie,

The incident nAPP22097363379 has one too many numbers. What's the correct incident number? Thanks

Robert Hamlet • Environmental Specialist - Advanced

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





From: Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Thursday, June 23, 2022 7:46 AM

To: Enviro, OCD, EMNRD < OCD. Enviro@state.nm.us>; Bratcher, Mike, EMNRD

<mike.bratcher@state.nm.us>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>

Cc: Pennington, Shelby G <<u>shelby.g.pennington@exxonmobil.com</u>>; DelawareSpills /SM

<DelawareSpills@exxonmobil.com>; acole@ensolum.com; bbelill@ensolum.com

Subject: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

XTO is requesting an extension of the current deadlines of June 23, 2022, July 4, 2022, July 7, 2022, and July 14, 2022, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the Poker Lake Unit 21 BD 104H(2), 124H, and 123H (Incident Numbers nAPP22097363379, nAPP2210942764, nAPP2211151438 and nAPP221651017). The four releases are located on the same well pad and occurred during frac operations on March 25, 2022, April 5, 2022, April 8, 2022, and April 15, 2022, respectively. Initial assessment of the release areas has been completed, however; remediation work could not begin until frac operations were complete. XTO operations provided notification that the pad was clear, and additional site assessment was completed on June 17, 2022. Based on the most recent analytical results, additional remediation activities are required. In order to complete the remediation activities and submit a remediation work plan or closure request, XTO is requesting a 90-day extension until September 21, 2022.

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756



APPENDIX F

Friction Reducer Safety Data Sheet



SAFETY DATA SHEET

Issuing Date 01-Aug-2019 Revision Date 01-Aug-2019 Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name POLYglide Xcel-200

Other means of identification

Product Code(s) 10497

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use No information available

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address Manufacturer Address

PfP Industries PfP Industries 29738 Goynes Rd. 29738 Goynes Rd. Katy, TX 77493 Katy, TX 77493

Emergency telephone number

Company Phone Number 281-371-2000

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 4

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Combustible liquid

EN / AGHS Page 1/8

Revision Date 01-Aug-2019

Appearance Opaque Physical state Liquid Odor Mineral Oil

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

May be harmful in contact with skin Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No	Weight-%	Trade secret
Petroleum distillates, hydrotreated light	64742-47-8	40 - 70	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination.

Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

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Revision Date 01-Aug-2019

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

Keep product and empty container away from heat and sources of ignition. In the event of

fire, cool tanks with water spray.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for

fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Take precautionary measures against static discharges. Do

not touch or walk through spilled material.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular

national regulations. Store in accordance with local regulations.

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Revision Date 01-Aug-2019

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure

limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers

Eyewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection No special protective equipment required.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Do not eat, drink or smoke when using this product. Contaminated work clothing should not

be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid
Appearance Opaque

Color Milky white to yellow

Odor Mineral Oil

Odor threshold No information available

Property Values Remarks • Method

pH No data available None known
Melting point / freezing point No data available None known
Boiling point / boiling range No data available None known

Flash point >= 67 °C / 153 °F

Evaporation rate No data available None known Flammability (solid, gas) No data available None known

Flammability Limit in Air None known

Upper flammability limit: No data available
Lower flammability limit: No data available

Vapor pressureNo data availableNone knownVapor densityNo data availableNone known

Relative density 0.97 - 1.03 Water solubility Miscible in water

Solubility in other solvents
Partition coefficient
No data available
None known
Autoignition temperature
No data available
None known

Kinematic viscosity ≥150 mm²/s

Dynamic viscosity No data available None known

Explosive properties

No information available

Oxidizing properties

No information available

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Revision Date 01-Aug-2019

Other Information

Softening point
Molecular weight
VOC Content (%)
Liquid Density
No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

 ATEmix (oral)
 5,005.00 mg/kg

 ATEmix (dermal)
 2,002.00 mg/kg

 ATEmix (inhalation-dust/mist)
 5.20 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum distillates, hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

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Revision Date 01-Aug-2019

Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated light 64742-47-8		2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static		4720: 96 h Den-dronereides heteropoda mg/L LC50

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated. Product does not sustain combustion (49 CFR 173.120(b)(3))

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Does not comply
IECSC Complies
KECL Complies

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PICCS Complies
AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard No
Chronic Health Hazard No
Fire hazard Yes
Sudden release of pressure hazard No
Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 2 Flammability 2 Instability 0 Physical and chemical

properties -

HMIS Health hazards 2 Flammability 2 Physical hazards 0 Personal protection X

Issuing Date 01-Aug-2019

Revision Date 01-Aug-2019

Revision Note No information available.

Disclaimer

The data supplied herein is for use only in connection with occupational safety and health. The information provided in this Safety Data Sheet is believed to be correct as of the date issued. Updates to this information may be obtained by contacting (either reference contact location or website). PfP Industries MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. This information is not meant to be an all-inclusive document on worldwide hazard communication regulations. Each user of the material described herein must evaluate the conditions of use and design, many of which will be solely within the user's knowledge and control, and the appropriate protective actions, including proper notification and training of employees, necessary to prevent employee exposures, property damage or release to the environment.

End of Safety Data Sheet

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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 145416

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	145416
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	The Closure Report is Approved. Chain of Custody and Analysis Request form on 6/17/22 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 14.0 deg. Celsius. Chain of Custody and Analysis Request form on 9/15/22 show samples not received at proper temperature of 6 deg. Celsius or below. Samples were delivered at temperature of 15.8 deg. Celsius. If samples are improperly cared for again on future remediation projects, the report will be immediately denied.	