Page 6

Oil Conservation Division

Incident	ID	NAPP2214547737
District F	۲P	
Facility I	D	
Applicati	ion 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.

<u>Closure Report Attachment Checklist</u> : Each of the following	items must be included in the closure report.	
A scaled site and sampling diagram as described in 19.15.29.11 NMAC		
Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection)		
Laboratory analyses of final sampling (Note: appropriate OD	C District office must be notified 2 days prior to final sampling)	
Description of remediation activities		
and regulations all operators are required to report and/or file certaid may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and re human health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the co- accordance with 19.15.29.13 NMAC including notification to the C Printed Name:Garrett Green	ations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in	
email:garrett.green@exxonmobil.com	Telephone:575-200-0729	
OCD Only		
Received by: Jocelyn Harimon	Date: 11/30/2022	
	of liability should their operations have failed to adequately investigate and water, human health, or the environment nor does not relieve the responsible /or regulations.	
Closure Approved by: <u><i>Robert Hamlet</i></u>	Date: <u>2/22/2023</u>	
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced	

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

State of New Mexico Energy Minerals and Natural Resources Department

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

)

Page 2cof 192

Incident ID	NAPP2214547737
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy	OGRID 5380
Contact Name Garrett Green	Contact Telephone 575-200-0729
Contact email garrett.green@exxonmobil.com	Incident # (assigned by OCD) NAPP2214547737
Contact mailing address 3104 E. Greene Street, Carlsbad, New Mexico, 88220	

Location of Release Source

Latitude 32.10974

Longitude	-105.00422
(NAD 83 in decimal degrees to 5 dec	imal places)

-103.88422

Site Name PLU 21 Brushy Draw 125H	Site Type Production Well	
Date Release Discovered 5/14/2022	API# (if applicable)	

Unit Letter	Section	Township	Range	County
0	21	258	30E	EDDY

Nature and Volume of Release

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

Crude Oil	Volume Released (bbls)	Volume Recovered (bbls)
Produced Water	Volume Released (bbls)	Volume Recovered (bbls)
	Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?	Yes No
Condensate	Volume Released (bbls)	Volume Recovered (bbls)
🗌 Natural Gas	Volume Released (Mcf)	Volume Recovered (Mcf)
★ Other (describe)	Volume/Weight Released (provide units)	Volume/Weight Recovered (provide units)
Produced Water w/ FR	7.00 BBLS	3.00 BBLS
Cause of Release During frac operations, a boost pump discharge hose ruptured, releasing fluids both to containment and pad. All free		

fluids were recovered. A third-party contractor has been retained for remediation purposes.

Page	2	

NA

Oil Conservation Division

Incident ID	NAPP2214547737
District RP	
Facility ID	
Application ID	

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

Initial Response

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

 \checkmark The source of the release has been stopped.

★ The impacted area has been secured to protect human health and the environment.

Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices.

▲ All free liquids and recoverable materials have been removed and managed appropriately.

If all the actions described above have <u>not</u> been undertaken, explain why:

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

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

Printed Name:	Title:
Signature:	Date:
email: garrett.green@exxonmobil.com	Telephone:
OCD Only	
Received by: Jocelyn Harimon	Date: 05/25/2022

Location:	PLU 21 BD 125H		
Spill Date:	5/14/2022		
	Area 1		-
Approximate A	rea =	16.84	cu.ft.
	VOLUME OF LEAK		
Total Crude Oil	=	0.00	bbls
Total Produced	Water =	3.00	bbls
	Area 2		
Approximate A	rea =	4489.00	sq. ft.
Average Satura	tion (or depth) of spill =	2.00	inches
Average Porosi	ty Factor =	0.03	
	VOLUME OF LEAK		
Total Crude Oil	=	0.00	bbls
Total Produced	Water =	4.00	bbls
	TOTAL VOLUME OF LEAK		
Total Crude Oil	=	0.00	bbls
Total Duaduase	Watar -	7.00	hhla

Total Produced Water =	7.00 bbls
TOTAL VOLUME RECOVERED	
Total Crude Oil =	0.00 bbls
Total Produced Water =	3.00 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

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator: (OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road A	Action Number:
Midland, TX 79707	110509
A	Action Type:
	[C-141] Release Corrective Action (C-141)
CONDITIONS	

CONDITIONS

Created By		Condition Date
jharimon	None	5/25/2022

Page Scof 192

Action 110509

Received by OCD: 11/30/2022 7:27:20 AM Form C-141 State of New Mexico

Oil Conservation Division

	Page 6 of 19
Incident ID	NAPP2214547737
District RP	
Facility ID	
Application ID	

Site Assessment/Characterization

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

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

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

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

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

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

Received by OCD: 11/30	/2022 7:27:20 AM State of New Me	viao		Page 7 of 192
			Incident ID	NAPP2214547737
Page 4	Oil Conservation E	01V1S10N	District RP	
			Facility ID	
			Application ID	
regulations all operators a public health or the enviro failed to adequately invest addition, OCD acceptance and/or regulations. Printed Name: _Garrett Signature: email: _garrett.green@o		release notifications and perform c ort by the OCD does not relieve th pose a threat to groundwater, surf	orrective actions for rele e operator of liability sh ace water, human health bliance with any other fe nator	eases which may endanger ould their operations have or the environment. In
OCD Only Received by: Joce	lyn Harimon	Date:1	1/30/2022	

Page 6

Oil Conservation Division

Incident ID	NAPP2214547737
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.

<u>Closure Report Attachment Checklist</u> : Each of the following items must be in	cluded in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11 NMAC	
Photographs of the remediated site prior to backfill or photos of the liner intermust be notified 2 days prior to liner inspection)	egrity if applicable (Note: appropriate OCD District office
Laboratory analyses of final sampling (Note: appropriate ODC District office	must be notified 2 days prior to final sampling)
Description of remediation activities	
I hereby certify that the information given above is true and complete to the best of and regulations all operators are required to report and/or file certain release notific may endanger public health or the environment. The acceptance of a C-141 report should their operations have failed to adequately investigate and remediate contain human health or the environment. In addition, OCD acceptance of a C-141 report of compliance with any other federal, state, or local laws and/or regulations. The resp restore, reclaim, and re-vegetate the impacted surface area to the conditions that ex- accordance with 19.15.29.13 NMAC including notification to the OCD when reclain Printed Name: _Garrett Green Title: _Environ Signature: Date:11/28 email:garrett.green@exxonmobil.com Telephone:	ations and perform corrective actions for releases which by the OCD does not relieve the operator of liability ination that pose a threat to groundwater, surface water, does not relieve the operator of responsibility for onsible party acknowledges they must substantially isted prior to the release or their final land use in mation and re-vegetation are complete.
OCD Only Determined have a local on Harimon Determined have a local on Harimon Determined have a local on the harimon determined have a	11/20/2022
Received by: Jocelyn Harimon Date:	11/30/2022
Closure approval by the OCD does not relieve the responsible party of liability shour remediate contamination that poses a threat to groundwater, surface water, human he party of compliance with any other federal, state, or local laws and/or regulations.	
Closure Approved by: Date	:
Printed Name: Title	9:

E N S O L U M

November 28, 2022

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

Re: Closure Request PLU 21 Brushy Draw 125H Incident Number NAPP2214547737 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 and soil sampling activities performed at the Poker Lake Unit (PLU) 21 Brushy Draw 125H (Site). The purpose of the site assessment and soil sampling activities was to assess for the presence or absence of impacts to soil following a release of produced water with friction reducer (FR) at the Site. Based on field observations, field screening activities, and laboratory analytical results from the soil sampling events, XTO is submitting this *Closure Request*, describing site assessment and delineation activities that have occurred and requesting no further action for Incident Number NAPP2214547737.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located Unit O, Section 21, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10974°N, 103.88422°W) and is associated with oil and gas exploration and production operations on private land owned by Janey Paschal.

On May 14, 2022, a boost pump discharge hose ruptured during hydraulic fracturing (frac) operations, resulting in a release of approximately 7 barrels (bbls) of produced water with FR into temporary containment and onto the well pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; 3 bbls of released fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on May 25, 2022. The release was assigned Incident Number NAPP2214547737.

Produced water is recycled through filtering and separation, then mixed in a blender with FR and used as frac fluid during the well completion process. The safety data sheet (SDS) for FR is provided as an attachment.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

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

XTO Energy, Inc Closure Request PLU 21 Brushy Draw 125H

ENSOLUM

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is USGS well 320629103533002, located approximately 2,402 feet southwest of the Site. The groundwater well has a reported depth to groundwater of 265 feet bgs and a total depth of 280 feet bgs. Ground surface elevation at the groundwater well location is 3,219 feet above mean sea level (amsl), which is approximately 31 feet lower in elevation than the Site. All wells used for depth to groundwater determination are presented on Figure 1. The referenced well records are included in Appendix A.

The closest continuously flowing or significant watercourse to the Site is an intermittent riverine channel, located approximately 985 feet northwest of the Site. The Site is greater than 200 feet from a lakebed, sinkhole, or playa lake and greater than 300 feet from an occupied residence, school, hospital, institution, church, or wetland. The Site is greater than 1,000 feet to a freshwater well or spring and is not within a 100-year floodplain or overlying a subsurface mine. The Site is not underlain by unstable geology (low potential karst designation area). Site receptors are identified on Figure 1.

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

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

SITE ASSESSMENT ACTIVITIES AND ANALYTICAL RESULTS

Frac operations continued onsite prohibiting XTO from conducting Site assessment immediately following notification of the release. Between September 27, 2022 and October 18, 2022, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and information from XTO regarding the location of the former containment. Once Ensolum personnel were able to access the Site, the temporary containment had been removed. Seven soil samples (SS01 through SS07) were collected within and around the release extent from a depth of 0.5 feet bgs to assess the lateral extent of the impacted soil. The preliminary soil samples were field screened for volatile organic compounds (VOCs) utilizing a calibrated photoionization detector (PID) and chloride utilizing Hach[®] chloride QuanTab[®] test strips, respectively. The soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation is included in Appendix B.

The soil samples were placed directly into pre-cleaned glass jars, labeled with the location, date, time, sampler name, method of analysis, and immediately placed on ice. The soil samples were transported at or below 4 degrees Celsius (°C) under strict chain-of-custody procedures to Eurofins Laboratories (Eurofins) in Carlsbad, New Mexico, for analysis of the following chemicals of conern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-GRO, TPH-DRO, and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

XTO Energy, Inc Closure Request PLU 21 Brushy Draw 125H

E N S O L U M

Potholes PH01 through PH04 were advanced via backhoe and hydrovac to a depth of 2 feet bgs within the release extent to assess the vertical extent of the release. Delineation soil samples were collected from each pothole at depths of 1-foot and 2 feet bgs. Soil from the delineation potholes was field screened for VOCs and chloride, respectively. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The delineation soil sample locations are depicted on Figure 2.

Laboratory analytical results for all delineation soil samples indicated concentrations of all COCs were compliant with the Site Closure Criteria. Laboratory analytical results are summarized in Table 1 and laboratory analytical reports are included in Appendix D.

CLOSURE REQUEST

Site assessment and delineation activities were conducted at the Site to address the May 14, 2022, release of produced water with FR. Laboratory analytical results for the delineation soil samples indicated all COC concentrations were compliant with the Site Closure Criteria. Based on the soil sample laboratory analytical results, no remediation was required.

Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2214547737.

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

Sincerely, Ensolum, LLC

Kalui Jennings

Kalei Jennings Senior Project Manager

Ashley L. ager

Ashley L. Ager, M.S., P.G. Principal

cc: Garrett Green, XTO Shelby Pennington, XTO Janey Paschal

Appendices:

- Figure 1 Site Receptor Map
- Figure 2 Soil Sample Locations
- Table 1Soil 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 SDS for Friction Reducer



FIGURES

Received by OCD: 11/30/2022 7:27:20 AM







TABLES

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ENSOLUM

				PLU 2	TABLE 1 LE ANALYTIC 21 Brushy Drav (TO Energy, Ir County, New 1	w 125H ic.				
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	losure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	1,000	2,500	20,000
		,		Delir	neation Soil Sa	nples	•		1	Ι
SS01	09/27/2022	0.5	<0.00201	<0.00402	<49.9	236	<49.9	236	236	2,760
SS02	09/27/2022	0.5	<0.00200	<0.00401	<49.9	299	<49.9	299	299	3,170
SS03	09/27/2022	0.5	<0.00199	<0.00398	<49.9	594	<49.9	594	594	922
SS04	11/07/2022	0.2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	14.0
SS05	11/07/2022	0.2	<0.00200	<0.00401	<49.8	<49.8	<49.8	<49.8	<49.8	301
SS06	11/07/2022	0.2	<0.00198	<0.00396	55.1	<50.0	14.4	55.1	69.5	195
SS07	11/07/2022	0.2	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	35.8
PH01	10/05/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	152
PH01A	10/05/2022	2	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	57.1
PH02	10/18/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	141
PH02A	10/18/2022	2	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	35.9
PH03	10/18/2022	1	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	63.2
PH03A	10/18/2022	2	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	32.6
PH04	10/18/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	42.0
PH04A	10/18/2022	2	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	22.5

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.

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon NMAC: New Mexico Administrative Code

Grey text indicates soil sample removed during excavation activities



APPENDIX A

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 realtime water data from over 13,500 stations nationwide.
- Full News 🔊

Groundwater levels for the Nation

Important: <u>Next Generation Monitoring Location Page</u>

Search Results -- 1 sites found

site_no list =

• 320629103533002

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320629103533002 25S.30E.21.33342 A

Available data for this site Groundwater: Field measurements V GO

Eddy County, New Mexico

Hydrologic Unit Code 13060011

Latitude 32°06'29", Longitude 103°53'30" NAD27

Land-surface elevation 3,209 feet above NAVD88

The depth of the well is 280 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

Table of data
Tab-separated data
Graph of data
Reselect period



Breaks in the plot represent a gap of at least one year between field measurements. Download a presentation-quality graph

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

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: 2022-07-05 17:04:41 EDT 0.7 0.64 nadww01





New Mexico Office of the State Engineer Point of Diversion Summary

		(quarters are 1=NW 2=NE 3=SW 4=SE) (quarters are smallest to largest)						SE)) (NAD83 UTM in meters)				
Well Tag	POD Number		• •				Tws	·	g	X Y		<i>,</i>	
8		3782 POD1	4	3	3	28	25S			60452	26	3551444 🍯	
Driller Lico Driller Nar		331	Drille	r Cor	npai	ny:	SB0 CO	-	LLC I	OBA S	TEV	WART BROTI	HERS DRILLING
Drill Start	Date:	01/16/2015	Drill I	Finish	Da ¹	te:	01	1/17	/2015		Plu	g Date:	
Log File Da	ate:	02/19/2015	PCW	Rcv I	Date	:						irce:	Artesian
Pump Type			Pipe I	Discha	arge	Size	e:				Est	imated Yield	:
Casing Size		8.63	Depth		-)5 fe	eet			pth Water:	277 feet
C	Wate	r Bearing Stratif	ications:		То	p I	Bottom	D	escrin	otion			
					26	•	320		-		vel/	Conglomerate	
					32		380					Conglomerate	
					38	0	410					Conglomerate	
					41	0	530					iltstone	
					53	0	590	Shale/Mudstone/Siltstone					
					59	0	600	600 Shale/Mudstone/Siltstone					
					60	0	630	Sł	nale/M	ludstor	ne/S	iltstone	
					63	0	650	Sł	nale/M	ludstor	ne/S	iltstone	
					65	0	700	Sł	nale/M	ludstor	ne/S	iltstone	
					70	0	710	Sł	nale/M	ludstor	ne/S	iltstone	
					71	0	760	Sł	nale/M	ludstor	ne/S	iltstone	
					76	0	770					iltstone	
					77	-	780					iltstone	
					78		790					iltstone	
					79	0	805	Sł	nale/M	ludstor	ne/S	iltstone	
<u>(</u>		Casing Per	forations:		То	рI	Bottom	l					
					27	0	805						

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

7/5/22 3:13 PM

POINT OF DIVERSION SUMMARY



APPENDIX B

Photographic Log





APPENDIX C

Lithologic Soil Sampling Logs

							Sample Name: PH01	Date: 10/5/22		
			6	ΟΙ			Site Name: PLU 21 BD 125H			
in the second second							Incident Number: NAPP221454773	37		
							Job Number: 03E1558068			
	LITHOL	.OGI		SAMPLING	i log		Logged By: Kase Parker	Method: Backhoe		
Coordinates	32.10974,	-103.	88422				Hole Diameter: ~3'	Total Depth: 2'		
	Comments: Field screening conducted with HACH Chloride Test Strips and							ively. Chloride test		
performed v	ith 1:4 dilu	ition f	actor of so	il to distilled	water. No c	orrection	factors included.			
Moisture Content Chloride	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions		
D ND		N N N	PH01 PH01A		$ \begin{array}{c} 0 \\ - 1 \\ - 2 \\ - 3 \\ - 4 \\ - 5 \\ - 6 \\ - 7 \\ - 8 \\ - 9 \\ - 10 \\ - 11 \\ - 11 \\ - 12 \\ - 12 \\ -$	GM GM	Well graded sitly caliche Well graded sitly caliche			

								Sample Name: PH02	Date: 10/18/22		
	-							Site Name: PLU 21 BD 125H	Date. 10/10/22		
			N		U	LU	Μ	Incident Number: NAPP22145477	27		
			_	_				Job Number: 03E1558068			
 	1										
Coord				-	ANPLINC			Logged By: Kase Parker Hole Diameter: ~3'	Total Depth: 2'		
	Coordinates: 32.10974, -103.88422 Comments: Field screening conducted with HACH Chloride Test Strips and										
								factors included.	tively. Chionde test		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions		
D	2,296	0	NN	PH02 PH02A		$ \begin{array}{c} 0 \\ - 1 \\ - 2 \\ - 3 \\ - 4 \\ - 5 \\ - 6 \\ - 7 \\ - 8 \\ - 9 \\ - 10 \\ - 11 \\ - 12 \\ \end{array} $	GM GM	Well graded sitly caliche Well graded sitly caliche			

								Sample Name: PH03	Date: 10/18/22		
								Site Name: PLU 21 BD 125H	Dute. 10/ 10/22		
			N		U	LU	M	Incident Number: NAPP22145477	27		
-								Job Number: 03E1558068			
 			0.01		SAMPLING						
Caard				-	SAIVIPLING			Logged By: Kase Parker Hole Diameter: ~3'	Method: Backhoe Total Depth: 2'		
	Coordinates: 32.10974, -103.88422 Comments: Field screening conducted with HACH Chloride Test Strips and										
								factors included.	tively. Chionde test		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions		
D	6,249 8,596	0	NN	РН03 РН03А		$ \begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 11 \\ 12 \\ \end{array} $	GM	Well graded sitly caliche Well graded sitly caliche			

								Sample Name: PH04	Date: 10/18/22		
a second				C				Site Name: PLU 21 BD 125H	,		
l in the second				J	ΟΙ			Incident Number: NAPP221454773	37		
								Job Number: 03E1558068			
	L	ITHOL	OGI		SAMPLING	i log		Logged By: Kase Parker	Method: Backhoe		
Coordina	ates: 32	.10974, •	-103.	88422				Hole Diameter: ~3'	Total Depth: 2'		
	Comments: Field screening conducted with HACH Chloride Test Strips and								ively. Chloride test		
performe	performed with 1:4 dilution factor of soil to distilled water. No correction							factors included.			
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	criptions		
	3,596	0	N N	PH04 PH04A		$ \begin{array}{c} 0 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \\ 12 \\ \end{array} $	GM	Well graded sitly caliche Well graded sitly caliche			



APPENDIX D

Laboratory Analytical Reports & Chain of Custody Documentation

Received by OCD: 11/30/2022 7:27:20 AM

LINKS

Review your project results through

EOL

Have a Question?

www.eurofinsus.com/Env

Released to Imaging: 2/22/2023 2:12:01 PM

Visit us at:

Ask— The Expert 5

🛟 eurofins

Environment Testing

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3077-1

Laboratory Sample Delivery Group: 03E1558068 Client Project/Site: PLU 21 BD 125H Revision: 1

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/2/2022 9:32:49 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 signature.

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

SDG: 03E1558068

Laboratory Job ID: 890-3077-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	8
QC Sample Results	9
QC Association Summary	13
Lab Chronicle	15
Certification Summary	16
Method Summary	17
Sample Summary	18
Chain of Custody	19
Receipt Checklists	20

Definitions/Glossary

Client: Ensolum Project/Site: PLU 21 BD 125H

Dil Fac

DL, RA, RE, IN

DL

DLC EDL

LOD

LOQ MCL

MDA

MDC

MDL

MPN

MQL

NC

ND

NEG POS

PQL

RER

RL RPD

TEF

TEQ TNTC

PRES QC

ML

Dilution Factor

Detection Limit (DoD/DOE)

Estimated Detection Limit (Dioxin)

Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE)

Method Detection Limit

Minimum Level (Dioxin)

Most Probable Number

Not Calculated

Negative / Absent

Positive / Present Practical Quantitation Limit

Presumptive

Quality Control

Method Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin) Toxicity Equivalent Quotient (Dioxin)

Too Numerous To Count

Reporting Limit or Requested Limit (Radiochemistry)

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

Decision Level Concentration (Radiochemistry)

EPA recommended "Maximum Contaminant Level"

Minimum Detectable Concentration (Radiochemistry)

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

Minimum Detectable Activity (Radiochemistry)

Qualifiers		3
GC VOA		
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	-
F2	MS/MSD RPD exceeds control limits	5
S1-	Surrogate recovery exceeds control limits, low biased.	
U	Indicates the analyte was analyzed for but not detected.	6
GC Semi VC	Α	
Qualifier	Qualifier Description	
F1	MS and/or MSD recovery exceeds control limits.	
U	Indicates the analyte was analyzed for but not detected.	8
HPLC/IC		
Qualifier	Qualifier Description	Ç
U	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	

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

Job ID: 890-3077-1

SDG: 03E1558068

Case Narrative

Client: Ensolum Project/Site: PLU 21 BD 125H

Job ID: 890-3077-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3077-1

REVISION

The report being provided is a revision of the original report sent on 10/8/2022. The report (revision 1) is being revised due to Per clien email, requesting sample depth correction.

Report revision history

Receipt

The samples were received on 9/27/2022 2:51 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 5.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-36296 and analytical batch 880-36323 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following samples were outside control limits: SS02 (890-3077-2) and (890-3068-A-1-H). 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35711 and analytical batch 880-35736 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Job ID: 890-3077-1 SDG: 03E1558068

Client Sample Results

RL

0.00201

0.00201

0.00201

0.00402

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS01 Date Collected: 09/27/22 11:30 Date Received: 09/27/22 14:51

Sample Depth: 0.5'

m-Xylene & p-Xylene

Analyte

Benzene

Toluene

Toluene		
Ethylbenzene		

o-Xylene	<0.00201	U	0.00201
Xylenes, Total	<0.00402	U	0.00402
Surrogate	%Recovery	Qualifier	Limits
Surrogate 4-Bromofluorobenzene (Surr)	%Recovery 123	Qualifier	Limits 70 - 130

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

Result Qualifier

<0.00201 U

<0.00201 U

<0.00201 U

<0.00402 U

Method: TAL SOP Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/08/22 09:02	1		

Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC)											
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac			
Total TPH	236		49.9	mg/Kg			10/03/22 11:24	1			

Method: SW846 8015B NM - E	Diesel Range	Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 03:24	1
Diesel Range Organics (Over C10-C28)	236		49.9	mg/Kg		09/29/22 13:24	10/01/22 03:24	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 03:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/29/22 13:24	10/01/22 03:24	1
o-Terphenyl	93		70 - 130			09/29/22 13:24	10/01/22 03:24	1

Method: MCAWW 300.0 - Anio	ons, Ion Chromatograph	y - Soluble					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2760	49.8	mg/Kg			09/29/22 23:20	10

Client Sample ID: SS02 Date Collected: 09/27/22 11:35 Date Received: 09/27/22 14:51 Sample Depth: 0.5'

Method: SW846 8021B - Vo	latile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/06/22 16:44	10/08/22 02:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/06/22 16:44	10/08/22 02:21	1

Eurofins Carlsbad

Matrix: Solid

Page 33 of 192

Job ID: 890-3077-1 SDG: 03E1558068

Lab Sample ID: 890-3077-1

Analyzed

Analyzed

Lab Sample ID: 890-3077-2

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

10/06/22 16:44 10/08/22 00:57

Prepared

Prepared

D

Matrix: Solid

Dil Fac

1

1

1

1

1

1

1

1

Dil Fac

Client Sample Results

Limits

70 - 130

RL

RL

49.9

0.00401

Unit

Unit

mg/Kg

mg/Kg

Page 34 of 192

Dil Fac

Dil Fac

Dil Fac

1

1

Job ID: 890-3077-1 SDG: 03E1558068

Client Sample ID: SS02 Date Collected: 09/27/22 11:35

Project/Site: PLU 21 BD 125H

Client: Ensolum

Sample Depth: 0.5'

1,4-Difluorobenzene (Surr)

Surrogate

Analyte

Analyte

Total TPH

Total BTEX

Date Received: 09/27/22 14:51

Method: TAL SOP Total BTEX - Total BTEX Calculation

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

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

%Recovery Qualifier

<0.00401 U

299

65 S1-

Result Qualifier

Result Qualifier

Lab Sample ID: 890-3077-2 Matrix: Solid

Analyzed

Analyzed

10/08/22 09:02

Analyzed

10/03/22 11:24

Lab Sample ID: 890-3077-3

Matrix: Solid

10/06/22 16:44 10/08/22 02:21

Prepared

Prepared

Prepared

D

D

Method: SW846 8015B NM - D	Diesel Range	• Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 03:45	1
Diesel Range Organics (Over C10-C28)	299		49.9	mg/Kg		09/29/22 13:24	10/01/22 03:45	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 03:45	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130			09/29/22 13:24	10/01/22 03:45	1
o-Terphenyl	112		70 - 130			09/29/22 13:24	10/01/22 03:45	1
Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatogra	ohy - Soluble					
Method: MCAWW 300.0 - Anio Analyte		omatograj Qualifier	ohy - Soluble RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: SS03

Date Collected: 09/27/22 11:40 Date Received: 09/27/22 14:51 Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/06/22 16:44	10/08/22 02:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	124		70 - 130			10/06/22 16:44	10/08/22 02:42	1
1,4-Difluorobenzene (Surr)	105		70 - 130			10/06/22 16:44	10/08/22 02:42	1
Method: TAL SOP Total BT	EX - Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/08/22 09:02	1
Method: SW846 8015 NM -	Diesel Range	Organics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	594		49.9	mg/Kg			10/03/22 11:24	1

Eurofins Carlsbad

Client Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS03

Date Collected: 09/27/22 11:40 Date Received: 09/27/22 14:51 Sample Depth: 0.5'

Method: SW846 8015B NM - D	iesel Range	organics	(DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 04:07	1
Diesel Range Organics (Over C10-C28)	594		49.9	mg/Kg		09/29/22 13:24	10/01/22 04:07	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/29/22 13:24	10/01/22 04:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130			09/29/22 13:24	10/01/22 04:07	1
o-Terphenyl	95		70 - 130			09/29/22 13:24	10/01/22 04:07	1
Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatogra	ohy - Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	922		25.1	mg/Kg			09/29/22 23:39	5

Job ID: 890-3077-1 SDG: 03E1558068

Lab Sample ID: 890-3077-3

Matrix: Solid

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

_			Pe
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3068-A-1-F MS	Matrix Spike	92	76
890-3068-A-1-G MSD	Matrix Spike Duplicate	105	96
890-3077-1	SS01	123	99
890-3077-2	SS02	113	65 S1-
890-3077-3	SS03	124	105
LCS 880-36296/1-A	Lab Control Sample	94	97
LCSD 880-36296/2-A	Lab Control Sample Dup	95	95
MB 880-36284/5-A	Method Blank	98	82
MB 880-36296/5-A	Method Blank	102	83
0			

Surrogate Legend BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Γ			Perc	ent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3077-1	SS01	103	93	
890-3077-2	SS02	124	112	
890-3077-3	SS03	105	95	
890-3080-A-21-C MS	Matrix Spike	106	89	
890-3080-A-21-D MSD	Matrix Spike Duplicate	96	80	
LCS 880-35711/2-A	Lab Control Sample	118	103	
LCSD 880-35711/3-A	Lab Control Sample Dup	109	110	
MB 880-35711/1-A	Method Blank	119	109	
Surrogata Lagand				

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-3077-1 SDG: 03E1558068

Prep Type: Total/NA

Prep Type: Total/NA

Page 36 of 192

5 6
Lab Sample ID: MB 880-36284/5-A

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 36323							Prep Type: To Prep Batch:	
· ·····, · · · · · · · · · · · · · · ·	МВ	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/06/22 15:09	10/07/22 10:37	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	98		70 - 130			10/06/22 15:09	10/07/22 10:37	1
1,4-Difluorobenzene (Surr)	82		70 - 130			10/06/22 15:09	10/07/22 10:37	1
Lab Sample ID: MB 880-36	296/5-A					Client Samp	le ID: Method	l Blank

Matrix: Solid Analysis Batch: 36323

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/06/22 16:44	10/07/22 21:29	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			10/06/22 16:44	10/07/22 21:29	1
1,4-Difluorobenzene (Surr)	83		70 - 130			10/06/22 16:44	10/07/22 21:29	1

Lab Sample ID: LCS 880-36296/1-A Matrix: Solid Analysis Batch: 36323

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1000		mg/Kg		100	70_130	
Toluene	0.100	0.1030		mg/Kg		103	70 - 130	
Ethylbenzene	0.100	0.09760		mg/Kg		98	70 - 130	
m-Xylene & p-Xylene	0.200	0.2073		mg/Kg		104	70 - 130	
o-Xylene	0.100	0.1060		mg/Kg		106	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	94		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

Lab Sample ID: LCSD 880-36296/2-A Matrix: Solid			C	Client Sa	mple	ID: Lat	Control Prep Ty		
Analysis Batch: 36323							Prep E	atch:	36296
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1015		mg/Kg		101	70 - 130	1	35

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Client Sample ID: Method Blank

5 7 Prep Type: Total/NA Prep Batch: 36296 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA Prep Batch: 36296

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 36296

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

Lab Sample ID: LCSD 880-36296/2-A Matrix: Solid Analysis Batch: 36323			Client Sa	mple	ID: Lat	Prep Ty		al/NA
	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualif	ier Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.1107	mg/Kg		111	70 - 130	7	35
Ethylbenzene	0.100	0.1022	mg/Kg		102	70 - 130	5	35
m-Xylene & p-Xylene	0.200	0.2208	mg/Kg		110	70 - 130	6	35
o-Xylene	0.100	0.1109	mg/Kg		111	70 - 130	5	35

	LUSD LUSD	
Surrogate	%Recovery Quality	fier Limits
4-Bromofluorobenzene (Surr)	95	70 - 130
1,4-Difluorobenzene (Surr)	95	70 - 130

Lab Sample ID: 890-3068-A-1-F MS Matrix: Solid Analysis Batch: 36323

Analysis Batch: 36323									Prep Batch: 36296
	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	<0.00200	U F1 F2	0.100	0.02395	F1	mg/Kg		24	70 - 130
Toluene	<0.00200	U F1 F2	0.100	0.03824	F1	mg/Kg		37	70 - 130
Ethylbenzene	<0.00200	U F1	0.100	0.03719	F1	mg/Kg		37	70 - 130
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.201	0.06673	F1	mg/Kg		33	70 - 130
o-Xylene	<0.00200	U F1 F2	0.100	0.03598	F1	mg/Kg		36	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	76		70 - 130

Lab Sample ID: 890-3068-A-1-G MSD Matrix: Solid Analysis Batch: 36323

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

/ maryolo Batom ocono									1100 -		
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00200	U F1 F2	0.0990	0.06384	F1 F2	mg/Kg		64	70 - 130	91	35
Toluene	<0.00200	U F1 F2	0.0990	0.06418	F1 F2	mg/Kg		64	70 - 130	51	35
Ethylbenzene	<0.00200	U F1	0.0990	0.05261	F1	mg/Kg		53	70 - 130	34	35
m-Xylene & p-Xylene	<0.00399	U F1 F2	0.198	0.1138	F1 F2	mg/Kg		57	70 - 130	52	35
o-Xylene	<0.00200	U F1 F2	0.0990	0.05730	F1 F2	mg/Kg		58	70 - 130	46	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								

70 - 130

70 - 130

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

105

96

Lab Sample ID: MB 880-35711/1-A Matrix: Solid Analysis Batch: 35736							le ID: Method Prep Type: To Prep Batch	otal/NA
	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		09/29/22 13:24	09/30/22 19:10	1

Page 38 of 192

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Released to Imaging: 2/22/2023 2:12:01 PM Page 10 of 21

Client: Ensolum Project/Site: PLU 21 BD 125H

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

Lab Sample ID: MB 880-357 Matrix: Solid Analysis Batch: 35736	711/1-A							Clie	ent Samı	ole ID: M Prep Ty Prep E	pe: To	tal/NA
· ·····, ··· · · · · · · · · · · · · ·	м	в мв										
Analyte	Resu	It Qualifier	RL		Uni	t	D	Р	repared	Analyz	zed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50	.0 U	50.0		mg/	Kg	_	09/2	29/22 13:24	09/30/22	19:10	1
Oll Range Organics (Over C28-C36)) <50	.0 U	50.0		mg/	Kg		09/2	29/22 13:24	09/30/22	19:10	1
Surrogate		B MB ry Qualifier	Limits						ronorod	Anoly		Dil Fac
1-Chlorooctane									Prepared 29/22 13:24	Analyz 09/30/22		DII Fac 1
o-Terphenyl	10		70 - 130 70 - 130							09/30/22		1
			10-100					00/2	10,22 10.21	00,00,22	10.10	,
Lab Sample ID: LCS 880-35	5711/2-A					Cli	ent	Sa	mple ID:	Lab Cor	trol S	ample
Matrix: Solid										Prep Ty		
Analysis Batch: 35736										Prep E		
			Spike	LCS	LCS					%Rec		
Analyte			Added	Result	Qualifier	· Unit		D	%Rec	Limits		
Gasoline Range Organics			1000	825.2		mg/Kg			83	70 - 130		
(GRO)-C6-C10												
Diesel Range Organics (Over C10-C28)			1000	990.0		mg/Kg			99	70 - 130		
	LCS L	cs										
Surrogate	%Recovery Q	ualifier	Limits									
1-Chlorooctane	118 103		70 - 130 70 - 130									
o-Terphenyl - Lab Sample ID: LCSD 880-3						Client S	am	nlo		Control	Sampl	
Matrix: Solid	557 11/3-A					Cheffit S	an	ihie		Prep Ty		
Analysis Batch: 35736										Prep E		
Analysis Baten. 00100			Spike		LCSD					%Rec	Jaton.	RPD
Analyte			Added	-	Qualifier	· Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics			1000	929.3	-	mg/Kg			93	70 - 130	12	
(GRO)-C6-C10												
Diesel Range Organics (Over			1000	1053		mg/Kg			105	70 - 130	6	20
C10-C28)												
	LCSD L	CSD										
Surrogate	%Recovery Q	ualifier	Limits									
1-Chlorooctane	109	_	70 - 130									
o-Terphenyl	110		70 - 130									
_ Lab Sample ID: 890-3080-A	-21-C MS							С	lient San	nple ID: I	Matrix	Spike
Matrix: Solid										Prep Ty		
Analysis Batch: 35736										Prep E	3atch:	35711
	Sample S		Spike	MS	MS					%Rec		
Analyte	Result Q		Added		Qualifier			_ <u>D</u>	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	<50.0 U	F1	998	661.8	F1	mg/Kg			66	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0 U		998	955.8		mg/Kg			93	70 - 130		
	MS M	s										
Surrogate	%Recovery Q		Limits									
1-Chlorooctane	106		70 - 130									
To make a set	00		70 400									

Page 39 of 192

Job ID: 890-3077-1 SDG: 03E1558068

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89

o-Terphenyl

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3077-1 SDG: 03E1558068

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

Matrix: Solid	-A-21-D MSD								latrix Spil Prep Ty		
Analysis Batch: 35736										Batch:	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	•	Qualifier	Added	-	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Gasoline Range Organics	<50.0		999	693.2		mg/Kg		69	70 - 130	5	20
(GRO)-C6-C10										-	_
Diesel Range Organics (Over	<50.0	U	999	867.0		mg/Kg		84	70 - 130	10	2
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	96		70 - 130	-							
o-Terphenyl	80		70 - 130								
lethod: 300.0 - Anion		omatograp	ohy				01	ant Can			Diam
Lab Sample ID: MB 880-3 Matrix: Solid	5680/1-A						CII	ent San	nple ID: M Prep Ty		
Analysis Batch: 35721											
· · · · · · · · · · · · · · · · · · ·		MB MB									
Analyte	Re	sult Qualifier		RL	Unit	[) F	Prepared	Analyz	zed	Dil Fa
Chloride	<	5.00 U		5.00	mg/K	g –			09/29/22	21:43	
Matrix: Solid	35680/2-A					Cliei	nt Sa	mple ID	ו: Lab Cor Prep Tיַ		
Matrix: Solid Analysis Batch: 35721	35680/2-A		Spike	_	LCS			·	Prep Ty %Rec		
Matrix: Solid Analysis Batch: 35721 ^{Analyte}	35680/2-A 		Added	Result	LCS Qualifier	Unit	nt Sa	%Rec	Prep Ty %Rec Limits		
Matrix: Solid Analysis Batch: 35721 ^{Analyte}	35680/2-A 		•	_				·	Prep Ty %Rec		
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880			Added	Result	Qualifier	Unit mg/Kg	D		Prep Ty %Rec Limits	ype: So Sample	e Du
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid			Added	Result	Qualifier	Unit mg/Kg	D		Prep Ty %Rec Limits 90 - 110	ype: So Sample	e Du
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid			Added	Result 247.4	Qualifier	Unit mg/Kg	D		Prep Ty %Rec Limits 90 - 110	ype: So Sample	e Dup
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721			Added 250	Result 247.4	Qualifier	Unit mg/Kg Client Sa Unit	D	<u>%Rec</u> 99 ID: Lal	Prep Ty %Rec Limits 90 - 110 Control Prep Ty	ype: So Sample	e Du blubl RP
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte			Added 250 Spike	Result 247.4	Qualifier C	Unit mg/Kg Client Sa	D	<u>%Rec</u> 99 ID: Lal	Prep Ty %Rec Limits 90 - 110 Control Prep Ty %Rec	ype: So Sample ype: So	e Du blubl RP Lim
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride	0-35680/3-A		Added 250 Spike Added	Result 247.4 LCSD Result	Qualifier C	Unit mg/Kg Client Sa Unit	D mple	<u>%Rec</u> 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 Control Prep Ty %Rec Limits 90 - 110	ype: So Samplo ype: So <u>RPD</u> 0	e Du blubi RPI Lim 2
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076	0-35680/3-A		Added 250 Spike Added	Result 247.4 LCSD Result	Qualifier C	Unit mg/Kg Client Sa Unit	D mple	<u>%Rec</u> 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 Control Prep Ty %Rec Limits 90 - 110	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Du Dubl RP Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid	0-35680/3-A		Added 250 Spike Added	Result 247.4 LCSD Result	Qualifier C	Unit mg/Kg Client Sa Unit	D mple	<u>%Rec</u> 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 Control Prep Ty %Rec Limits 90 - 110	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Duj blubl RPI Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid	0-35680/3-A		Added 250 Spike Added 250	Result 247.4 LCSD Result 248.0	Qualifier C LCSD Qualifier	Unit mg/Kg Client Sa Unit	D mple	<u>%Rec</u> 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Duj blubl RPI Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721	0-35680/3-A 	Sample	Added 250 Spike Added 250 Spike	Result 247.4 LCSD Result 248.0	Qualifier LCSD Qualifier MS	Unit mg/Kg Client Sa Unit mg/Kg	<u>P</u> mple <u>P</u> C	%Rec 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Duj blubl RPI Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte	0-35680/3-A -A-1-B MS Sample Result	Sample Qualifier	Added 250 Spike Added 250 Spike Added	Result 247.4 LCSD Result 248.0 MS Result	Qualifier C LCSD Qualifier	Unit mg/Kg Client Sa Unit mg/Kg	D mple	%Rec 99 ID: Lal %Rec 99 lient Sa	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec Limits	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Du Dubl RP Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte	0-35680/3-A 		Added 250 Spike Added 250 Spike	Result 247.4 LCSD Result 248.0	Qualifier LCSD Qualifier MS	Unit mg/Kg Client Sa Unit mg/Kg	<u>P</u> mple <u>P</u> C	%Rec 99 ID: Lal <u>%Rec</u> 99	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec	ype: So Samplo ype: So <u>RPD</u> 0 Matrix :	e Du Dubl RP Lim 2 Spik
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid	0-35680/3-A -A-1-B MS Sample Result 56.2		Added 250 Spike Added 250 Spike Added	Result 247.4 LCSD Result 248.0 MS Result	Qualifier LCSD Qualifier MS	Unit mg/Kg Client Sa Unit mg/Kg	<u>P</u> mple <u>P</u> <u>P</u>	%Rec 99 ID: Lal %Rec 99 lient Sa %Rec 100	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec Limits	ype: So Sample ype: So <u>RPD</u> 0 Matrix So ype: So ke Dup	e Du blubl RP Lim 2 Spik blubl
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid	0-35680/3-A -A-1-B MS Sample Result 56.2 -A-1-C MSD	Qualifier	Added 250 Spike Added 250 Spike Added 248	Result 247.4 LCSD Result 248.0 MS Result 304.2	Qualifier LCSD Qualifier MS Qualifier	Unit mg/Kg Client Sa Unit mg/Kg	<u>P</u> mple <u>P</u> <u>P</u>	%Rec 99 ID: Lal %Rec 99 lient Sa %Rec 100	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec Limits 90 - 110 Matrix Spil Prep Ty	ype: So Sample ype: So <u>RPD</u> 0 Matrix So ype: So ke Dup	e Du blubl RP Lim 2 Spik blubl
Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721	0-35680/3-A -A-1-B MS Sample Result 56.2 -A-1-C MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 248	Result 247.4 LCSD Result 248.0 MS Result 304.2	Qualifier LCSD Qualifier MS Qualifier	Unit mg/Kg Client Sa Unit mg/Kg	D mple D C D Samj	%Rec 99 ID: Lal %Rec 99 lient Sa %Rec 100 ble ID: N	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec Limits 90 - 110 Matrix Spil Prep Ty %Rec	ype: So Sample ype: So <u>RPD</u> 0 Matrix So ype: So ke Dup ype: So	e Duj blubi RPi Lim 2 Spik blubi licate blubi
Lab Sample ID: LCS 880- Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride Lab Sample ID: 890-3076 Matrix: Solid Analysis Batch: 35721 Analyte Chloride	0-35680/3-A -A-1-B MS Sample Result 56.2 -A-1-C MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 248	Result 247.4 LCSD Result 248.0 MS Result 304.2	Qualifier LCSD Qualifier MS Qualifier	Unit mg/Kg Client Sa Unit mg/Kg	<u>P</u> mple <u>P</u> <u>P</u>	%Rec 99 ID: Lal %Rec 99 99 lient Sa %Rec 100 100 ble ID: N 100	Prep Ty %Rec Limits 90 - 110 O Control Prep Ty %Rec Limits 90 - 110 mple ID: I Prep Ty %Rec Limits 90 - 110 Matrix Spil Prep Ty	ype: So Sample ype: So <u>RPD</u> 0 Matrix So ype: So ke Dup	e Du blubl RPI Lim 2 Spik blubl licat

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3077-1 SDG: 03E1558068

GC VOA

Prep Batch: 36284

Lab Sample ID MB 880-36284/5-A	Client Sample ID Method Blank	Prep Type Total/NA	Matrix Solid	<u>Method</u> 5035	Prep Batch
- Prep Batch: 36296					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3077-1	SS01	Total/NA	Solid	5035	
890-3077-2	SS02	Total/NA	Solid	5035	
890-3077-3	SS03	Total/NA	Solid	5035	
MB 880-36296/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36296/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36296/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3068-A-1-F MS	Matrix Spike	Total/NA	Solid	5035	
890-3068-A-1-G MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36323

Total/NA Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B	36296 36296 36296 36284
Total/NA Total/NA	Solid Solid	8021B 8021B	36296
Total/NA	Solid	8021B	
			36284
Total/NA	0.151		
IOIdi/INA	Solid	8021B	36296
Total/NA	Solid	8021B	36296
Total/NA	Solid	8021B	36296
Total/NA	Solid	8021B	36296
Total/NA	Solid	8021B	36296
	Total/NA	Total/NA Solid	Total/NA Solid 8021B

Analysis Batch: 36432

Lab Sample ID 890-3077-1	Client Sample ID SS01	Prep Type Total/NA	Matrix Solid	Total BTEX	Prep Batch
890-3077-2	SS02	Total/NA	Solid	Total BTEX	
890-3077-3	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 35711

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3077-1	SS01	Total/NA	Solid	8015NM Prep	
890-3077-2	SS02	Total/NA	Solid	8015NM Prep	
890-3077-3	SS03	Total/NA	Solid	8015NM Prep	
MB 880-35711/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35711/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35711/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3080-A-21-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3080-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35736

Lab Sample ID 890-3077-1	Client Sample ID SS01	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 35711	
890-3077-2	SS02	Total/NA	Solid	8015B NM	35711	
890-3077-3	SS03	Total/NA	Solid	8015B NM	35711	
MB 880-35711/1-A	Method Blank	Total/NA	Solid	8015B NM	35711	
LCS 880-35711/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35711	

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5

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

GC Semi VOA (Continued)

Analysis Batch: 35736 (Continued)

Lab Sample ID LCSD 880-35711/3-A	Client Sample ID Lab Control Sample Dup	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 35711
890-3080-A-21-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35711
890-3080-A-21-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35711
Analysis Batch: 3596	6				

Lab Sample ID 890-3077-1	Client Sample ID SS01	Prep Type Total/NA	Matrix Solid	Method 8015 NM	Prep Batch
890-3077-2	SS02	Total/NA	Solid	8015 NM	
890-3077-3	SS03	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 35680

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3077-1	SS01	Soluble	Solid	DI Leach	
890-3077-2	SS02	Soluble	Solid	DI Leach	
890-3077-3	SS03	Soluble	Solid	DI Leach	
MB 880-35680/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-35680/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-35680/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3076-A-1-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3076-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3077-1	SS01	Soluble	Solid	300.0	35680
890-3077-2	SS02	Soluble	Solid	300.0	35680
890-3077-3	SS03	Soluble	Solid	300.0	35680
MB 880-35680/1-A	Method Blank	Soluble	Solid	300.0	35680
LCS 880-35680/2-A	Lab Control Sample	Soluble	Solid	300.0	35680
LCSD 880-35680/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	35680
890-3076-A-1-B MS	Matrix Spike	Soluble	Solid	300.0	35680
890-3076-A-1-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	35680

Page 42 of 192

5

8

Job ID: 890-3077-1 SDG: 03E1558068

Initial

Amount

4.97 g

5 mL

10.02 g

1 uL

5.02 g

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

Batch

36296

36323

36432

35966

35711

35736

35680

35721

Number

Dil

1

1

1

1

10

Factor

Run

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS01 Date Collected: 09/27/22 11:30 Date Received: 09/27/22 14:51

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

Batch

5035

8021B

Total BTEX

8015NM Prep

8015 NM

8015B NM

DI Leach

300.0

Method

Job ID: 890-30

Prepared

or Analyzed

10/06/22 16:44

10/08/22 00:57 MNR

10/08/22 09:02 AJ

10/03/22 11:24 SM

09/29/22 13:24 DM

10/01/22 03:24 AJ

09/29/22 12:00 SMC

09/29/22 23:20 CH

Job ID: 890-3077-1 SDG: 03E1558068

Page 43 of 192

Lab Sample ID: 890-3077-1

Analyst

MNR

Matrix: Solid

Lab

EET MID

Lab Sample ID: 890-3077-2 Matrix: Solid

Client Sample ID: SS02 Date Collected: 09/27/22 11:35 Date Received: 09/27/22 14:51

	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	36296	10/06/22 16:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36323	10/08/22 02:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36432	10/08/22 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35966	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35711	09/29/22 13:24	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	10/01/22 03:45	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	35680	09/29/22 12:00	SMC	EET MID
Soluble	Analysis	300.0		10			35721	09/29/22 23:24	СН	EET MID

Client Sample ID: SS03 Date Collected: 09/27/22 11:40 Date Received: 09/27/22 14:51

Lab Sample ID: 890-3077-3 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			5.02 g	5 mL	36296	10/06/22 16:44	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36323	10/08/22 02:42	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36432	10/08/22 09:02	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35966	10/03/22 11:24	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35711	09/29/22 13:24	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35736	10/01/22 04:07	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	35680	09/29/22 12:00	SMC	EET MID
Soluble	Analysis	300.0		5			35721	09/29/22 23:39	СН	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3077-1 SDG: 03E1558068

Laboratory: Eurofins Midland

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

uthority		ogram	Identification Number	Expiration Date
exas	NE	LAP	T104704400-22-24	06-30-23
The following analytes	are included in this repo	rt. but the laboratorv is r	not certified by the governing authority.	This list may include analytes for whic
the agency does not o	•	, ,	······································	····- ···
0,	•	Matrix	Analyte	·····, ·····, ·····, ·····, ····
the agency does not o	ffer certification.			

Eurofins Carlsbad

Page 44 of 192

10

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3077-1 SDG: 03E1558068

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 125H Page 46 of 192

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-3077-1	SS01	Solid	09/27/22 11:30	09/27/22 14:51	(
890-3077-2	SS02	Solid	09/27/22 11:35	09/27/22 14:51	(
890-3077-3	SS03	Solid	09/27/22 11:40	09/27/22 14:51	0.

Released to Imaging: 2/22/2023 2:12:01 PM

Work Order No:	wnfie ST/A	Preservative Codes None: NO DI Water: H ₅ O None: NO DI Water: H ₅ O Cool: Cool MeOH: Me H ₅ PO ₄ : H ₂ NaOH: Ma H ₅ PO ₄ : H ₂ NaOH: Ma NaHSO NaOH: Na NaHSO NaOH: SAPC Sample Comments NAPP2214541731 Napp2214541731 NaPP2214541731	O ₂ Na Sr TI Sn U V Zn 31/245.1/7470 /7471 (Signature) Date/Time
Work O	Wo Program: UST/PST P State of Project: Reporting: Level II Le Deliverables: EDD	NALYSIS REQUES 1	g Mn Mo Ni K Se Ag SiO ₂ Na Sr ⁻ Se Ag TI U Hg: 1631 / 245.1 / se and conditions yond the control se previously negotiated. ure) Received by: (Signature)
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	Garrett Green XTO Energy 3124 E Green St Carlshad, NM 28220 Censol um-com	AMILIASIS RECORD	(a): 8RCRA Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K 0 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U ent compary to Eurofins Xenco, Its affiliates and subcontractors. It assigns standard terms and conditions any losses or expenses incurred by the client if such losses are due to circumstances beyond the control mple submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. <i>E 2 22,223 145</i> 12 <i>E 2 22,233 145</i> 12 <i>E 2 22,233 145</i> 12 <i>a</i>
Houston, TX Midland, TX (4: EL Paso, TX (5 HObbs, NM (5	Bill to: (if different) Company Name: Address: City, State ZIP:	Tarm Moutine Tarm Moutine Due Date: Pres. Di: Handling: D: Handlin	13PPM Texas 11 AI Sb LP / SPLP 6010 : 8RCRA S ase order from client company to Eurof vesponsibility for any losses or expense vesponsibility for any losses or expense as the sech sample submitted to Eu nature)
Controlins Environment Testing Xenco	Project Manager: Kaler Jennings Company Name: Enscium, LLC Address: 3122 Nat'l Parks Hwy City, State ZIP: Carly wal, NM 88:220 Phone: 8171-683-2503 Email:	Project Number: Project Number: <th< td=""><td>Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo N Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Ca Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 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 serves. Eurofins Xenco, will be lable only for the cost of samples constitutes a valid purchase or expenses incurred by the client fruch losses are due to circumstances beyond the control of Eurofins Xenco. Aminimum charge of \$85 cov will be applied to each project and a charge of \$56 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously mego of sets cowills be applied to each project and a charge of \$56 for each sample submitted to Eurofins Xenco. Jut not analyzed. These terms will be enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. The enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. These terms will be enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. The Relinquished by: (Signature)</td></th<>	Total 200.7 / 6010 200.8 / 6020: 8RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo N Circle Method(s) and Metal(s) to be analyzed TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Ca Cr Co Cu Pb Mn Mo Ni Se Ag Tl U 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 serves. Eurofins Xenco, will be lable only for the cost of samples constitutes a valid purchase or expenses incurred by the client fruch losses are due to circumstances beyond the control of Eurofins Xenco. Aminimum charge of \$85 cov will be applied to each project and a charge of \$56 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously mego of sets cowills be applied to each project and a charge of \$56 for each sample submitted to Eurofins Xenco. Jut not analyzed. These terms will be enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. The enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. These terms will be enforced unless previously mego of the Community of the control of Eurofins Xenco. Jut not analyzed. The Relinquished by: (Signature)

11/2/2022 (Rev. 1)

Page 47 of 192

Login Sample Receipt Checklist

Login Sample Recei	int Check	liet		1
Login oumple Rooti				2
Client: Ensolum			Job Number: 890-3077-1 SDG Number: 03E1558068	3
Login Number: 3077			List Source: Eurofins Carlsbad	4
List Number: 1				5
Creator: Stutzman, Amanda				5
Question	Answer	Comment		6
The cooler's custody seal, if present, is intact.				
Sample custody seals, if present, are intact.				7
The cooler or samples do not appear to have been compromised or tampered with.				8
Samples were received on ice.				
Cooler Temperature is acceptable.				9
Cooler Temperature is recorded.				
COC is present.				
COC is filled out in ink and legible.				
COC is filled out with all pertinent information.				
Is the Field Sampler's name present on COC?				
There are no discrepancies between the containers received and the COC.				
Samples are received within Holding Time (excluding tests with immediate HTs)				13
Sample containers have legible labels.				14
Containers are not broken or leaking.				
Sample collection date/times are provided.				
Appropriate sample containers are used.				
Sample bottles are completely filled.				
Sample Preservation Verified.				
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs				

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

14

Job Number: 890-3077-1 SDG Number: 03E1558068

List Source: Eurofins Midland

List Creation: 09/29/22 11:12 AM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3077 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	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 11/30/2022 7:27:20 AM

🔅 eurofins

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3157-1

Laboratory Sample Delivery Group: 03E1558068 Client Project/Site: PLU 21 BD 125H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/13/2022 11:08:54 AM Jessica Kramer, Project Manager (432)704-5440 Jessica.Kramer@et.eurofinsus.com) of 192

14

LINKS Review your project results through EOL Have a Question? Ask The Expert

Visit us at: www.eurofinsus.com/Env Released to Imaging: 2/22/2023 2:12:01 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 signature.

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

SDG: 03E1558068

Laboratory Job ID: 890-3157-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	12
Lab Chronicle	14
Certification Summary	15
Method Summary	16
Sample Summary	17
Chain of Custody	18
Receipt Checklists	19



	Definitions/Glossary		
Client: Ensolur			
Project/Site: P	PLU 21 BD 125H SDG: 03E1558	,068	
Qualifiers		_ /	3
GC VOA		-	
Qualifier	Qualifier Description	_	
F1	MS and/or MSD recovery exceeds control limits.		
F2	MS/MSD RPD exceeds control limits		3
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VOA	A Contraction of the second		
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.	_ 7	
HPLC/IC			
Qualifier	Qualifier Description		2
U	Indicates the analyte was analyzed for but not detected.	_	ì
Glossary		—	9
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)		

Released to Imaging: 2/22/2023 2:12:01 PM

Negative / Absent

Positive / Present Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

Presumptive Quality Control

NEG

POS

PQL PRES

QC RER

RL

RPD

TEF

TEQ TNTC

Eurofins Carlsbad

4

5

Job ID: 890-3157-1 SDG: 03E1558068

Job ID: 890-3157-1

Client: Ensolum

Laboratory: Eurofins Carlsbad

Project/Site: PLU 21 BD 125H

Narrative

Job Narrative 890-3157-1

Receipt

The samples were received on 10/5/2022 3:26 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 21.2°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH01 (890-3157-1) and PH01A (890-3157-2).

GC VOA

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

GC Semi VOA

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

HPLC/IC

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

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

Job ID: 890-3157-1 SDG: 03E1558068

Client Sample ID: PH01

Project/Site: PLU 21 BD 125H

Date Collected: 10/05/22 09:40 Date Received: 10/05/22 15:26

Sample Depth: 1'

Client: Ensolum

Lab Sample ID: 890-3157-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/11/22 16:29	10/12/22 18:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130			10/11/22 16:29	10/12/22 18:27	1
1,4-Difluorobenzene (Surr)	103		70 - 130			10/11/22 16:29	10/12/22 18:27	1
Method: TAL SOP Total BTEX - T	otal BTEX Cal	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/13/22 11:47	1
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/10/22 12:07	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	• •	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:16	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:16	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130			10/07/22 07:40	10/07/22 12:16	1
o-Terphenyl	92		70 - 130			10/07/22 07:40	10/07/22 12:16	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - So	oluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	152		5.02	mg/Kg			10/11/22 14:44	1
Client Sample ID: PH01A						Lab Sar	nple ID: 890-	3157-2
ate Collected: 10/05/22 09:45							Matri	x: Solid
ate Received: 10/05/22 15:26								
Sample Depth: 2'								
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/11/22 16:29	10/12/22 18:48	1
Toluene	<0.00198	U	0.00198	mg/Kg		10/11/22 16:29	10/12/22 18:48	1
Ethylbenzene	< 0.00198	U	0.00198	ma/Ka		10/11/22 16:29	10/12/22 18:48	1

Ethylbenzene <0.00198 U 0.00198 mg/Kg 10/11/22 16:29 10/12/22 18:48 <0.00396 U 0.00396 mg/Kg 10/11/22 16:29 10/12/22 18:48 m-Xylene & p-Xylene 1 o-Xylene <0.00198 U 0.00198 10/11/22 16:29 10/12/22 18:48 mg/Kg 1 Xylenes, Total <0.00396 U 0.00396 mg/Kg 10/11/22 16:29 10/12/22 18:48 1 %Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 4-Bromofluorobenzene (Surr) 101 70 - 130 10/11/22 16:29 10/12/22 18:48 1

Eurofins Carlsbad

Client Sample Results

Job ID: 890-3157-1 SDG: 03E1558068

Lab Sample ID: 890-3157-2

Matrix: Solid

5

Date Collected: 10/05/22 09:45 Date Received: 10/05/22 15:26

Project/Site: PLU 21 BD 125H

Client Sample ID: PH01A

Sample Depth: 2'

Client: Ensolum

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

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	104		70 - 130			10/11/22 16:29	10/12/22 18:48	1
Method: TAL SOP Total BTEX - T	otal BTEX Calo	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00396	U	0.00396	mg/Kg			10/13/22 11:47	1
Method: SW846 8015 NM - Diese	Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/10/22 12:07	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(60)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:38	1
(GRO)-C6-C10				0.0				
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:38	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 12:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			10/07/22 07:40	10/07/22 12:38	
o-Terphenyl	104		70 - 130			10/07/22 07:40	10/07/22 12:38	-
Method: MCAWW 300.0 - Anions	Ion Chromato	oraphy - So	oluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	57.1		4.98	mg/Kg		. <u> </u>	10/11/22 15:02	1

Page 56 of 192

Job ID: 890-3157-1 SDG: 03E1558068

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)	
		BFB1	DFBZ1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		
880-20232-A-1-A MS	Matrix Spike	99	107		
880-20232-A-1-B MSD	Matrix Spike Duplicate	77	109		
890-3157-1	PH01	97	103		
890-3157-2	PH01A	101	104		
LCS 880-36699/1-A	Lab Control Sample	100	97		
LCSD 880-36699/2-A	Lab Control Sample Dup	103	104		
MB 880-36699/5-A	Method Blank	90	112		
Surrogate Legend					

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
Semala ID	Client Semula ID	1CO1 (70-130)	OTPH1 (70-130)	
Sample ID 3145-A-2-D MS	Client Sample ID Matrix Spike	77	73	
145-A-2-E MSD	Matrix Spike Duplicate	89	74	
57-1	PH01	95	92	
57-2	PH01A	107	104	
0-36321/2-A	Lab Control Sample	102	93	
) 880-36321/3-A	Lab Control Sample Dup	102	87	
80-36321/1-A	Method Blank	90	89	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

Client: Ensolum

Project/Site: PLU 21 BD 125H

Lab Sample ID: MB 880-36699/5-A								Client Sa	mple ID: M	ethod	Blank
Matrix: Solid									Prep Ty		
Analysis Batch: 36717									Prep B		
	1	IB MB									
Analyte	Res	ult Qualifie	r RL		Unit		D	Prepared	Analyzed	I	Dil Fac
Benzene	<0.002	00 U	0.00200		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
Toluene	<0.002	00 U	0.00200		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
Ethylbenzene	<0.002	00 U	0.00200		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
m-Xylene & p-Xylene	<0.004	00 U	0.00400		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
o-Xylene	<0.002	00 U	0.00200		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
Xylenes, Total	<0.004	00 U	0.00400		mg/K	g	1	10/11/22 16:29	10/12/22 11	:29	1
		NB MB									
Surrogate	%Recov		r Limits					Prepared	Analyzeo	,	Dil Fac
4-Bromofluorobenzene (Surr)	70Rec00	90 Quanne	70 - 130				_	10/11/22 16:29	10/12/22 11		Dii Fac 1
1,4-Difluorobenzene (Surr)	-	12	70 <u>-</u> 130					10/11/22 16:29	10/12/22 11		1
		12	70 - 750					10/11/22 10.29	10/12/22 11	.23	,
Lab Sample ID: LCS 880-36699/1-A							Clie	ent Sample	ID: Lab Con	trol S	ample
Matrix: Solid									Prep Ty		-
Analysis Batch: 36717									Prep B		
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits		
Benzene			0.100	0.08151		mg/Kg		82	70 - 130		
Toluene			0.100	0.08917		mg/Kg		89	70 - 130		
Ethylbenzene			0.100	0.07884		mg/Kg		79	70 - 130		
m-Xylene & p-Xylene			0.200	0.1575		mg/Kg		79	70 - 130		
o-Xylene			0.100	0.07833		mg/Kg		78	70 - 130		
		<u> </u>									
Survey state	LCS L		Limits								
Surrogate % 4-Bromofluorobenzene (Surr)	Recovery 100	luaimer	70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130								
	37		70 - 130								
Lab Sample ID: LCSD 880-36699/2	-A					CI	ient S	ample ID: L	ab Control	Samp	e Dup
Matrix: Solid									Prep Ty		
Analysis Batch: 36717									Prep B		
-			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added	Result	Qualifier	Unit		D %Rec	Limits	RPD	Limit
Benzene			0.100	0.09035		mg/Kg		90	70 - 130	10	35
Toluene			0.100	0.09725		mg/Kg		97	70 - 130	9	35
Ethylbenzene			0.100	0.08683		mg/Kg		87	70 - 130	10	35
m-Xylene & p-Xylene			0.200	0.1722		mg/Kg		86	70 - 130	9	35
o-Xylene			0.100	0.08568		mg/Kg		86	70 - 130	9	35
0	LCSD L		1 : :4								
	Recovery 0	ualifier	Limits								
4-Bromofluorobenzene (Surr)	103 104		70 - 130 70 - 130								
1,4-Difluorobenzene (Surr)	104		70 - 130								
Lab Sample ID: 880-20232-A-1-A M	IS							Client	Sample ID: I	Natrix	Snike
Matrix: Solid								Onent c	Prep Ty		-
Analysis Batch: 36717									Prep B		
Analysis ballen, ap/17											

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.09214		mg/Kg		92	70 - 130	
Toluene	<0.00201	U F1	0.100	0.09307		mg/Kg		93	70 - 130	

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Lab Sample ID: 880-20232-A-1-A MS

QC Sample Results

Spike

Added

0.100

0.201

0.100

Limits 70 - 130

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 125H

Matrix: Solid

Analyte

o-Xylene

Surrogate

Matrix: Solid

Analyte

Benzene

Toluene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 36717

4-Bromofluorobenzene (Surr)

Analysis Batch: 36717

1,4-Difluorobenzene (Surr)

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

Sample Sample

<0.00201 U F1 F2

<0.00402 U F1 F2

<0.00201 U F1 F2

MS MS

99

107

%Recovery

Qualifier

Result Qualifier

Job ID: 890-3157-1 SDG: 03E1558068

%Rec

Limits

70 - 130

70 - 130

70 - 130

%Rec

77

78

75

D

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 36699 7 **Client Sample ID: Matrix Spike Duplicate** Prep Type: Total/NA Prep Batch: 36699 RPD RPD Limit 15 35 35 35 38 35 49 35

48

35

Sample	Sample	Spike	MSD	MSD				%Rec
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
<0.00201	U	0.0998	0.07929		mg/Kg		79	70 - 130
<0.00201	U F1	0.0998	0.06564	F1	mg/Kg		66	70 - 130
<0.00201	U F1 F2	0.0998	0.05281	F1 F2	mg/Kg		53	70 - 130
<0.00402	U F1 F2	0.200	0.09464	F1 F2	mg/Kg		47	70 - 130
<0.00201	U F1 F2	0.0998	0.04674	F1 F2	mg/Kg		46	70 - 130
MSD	MSD							
%Recovery	Qualifier	Limits						
77		70 - 130						

MS MS

0.07772

0.1563

0.07596

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

Ethylbenzene	<0.0020
m-Xylene & p-Xylene	<0.0040
o-Xylene	<0.0020

Lab Sample ID: 880-20232-A-1-B MSD

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	77		70 - 130
1,4-Difluorobenzene (Surr)	109		70 - 130

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

Lab Sample ID: MB 880-36321/1- Matrix: Solid Analysis Batch: 36313	A					Client Sa	mple ID: Metho Prep Type: ⊺ Prep Batch	otal/NA
	МВ	MB					-	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 09:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 09:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 07:40	10/07/22 09:54	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	90		70 - 130			10/07/22 07:40	10/07/22 09:54	1
o-Terphenyl	89		70 - 130			10/07/22 07:40	10/07/22 09:54	1
Lab Sample ID: LCS 880-36321/2	2-A				C	lient Sample I	D: Lab Control	Sample

ampie ·30321/2 Matrix: Solid Analysis Batch: 36313

Analysis Batch: 36313							Prep	Batch: 36321
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	859.3		mg/Kg		86	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1064		mg/Kg		106	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8015B NI

		games (E	DRO) (GC) (C		, u)							
Lab Sample ID: LCS 880-363	321/2-A						Client	t Sample	e ID: Lab Co	ontrol S	ample	
Matrix: Solid									Prep 7	Type: Tot	tal/NA	
Analysis Batch: 36313										Batch:		
	1.05	LCS										
Surrogate			Limits									
1-Chlorooctane			70 - 130									
o-Terphenyl	93		70 - 130									
Lab Sample ID: LCSD 880-36	6321/3-A					Clier	nt San	nple ID: /	Lab Contro	ار Sampl	e Dup	1
Matrix: Solid										Type: Tot		
Analysis Batch: 36313										Batch:		
-			Spike	LCSD	LCSD				%Rec		RPD	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics			1000	825.5		mg/Kg		83	70 - 130	4	20	
(GRO)-C6-C10												
Diesel Range Organics (Over			1000	989.6		mg/Kg		99	70 - 130	7	20	
C10-C28)												
	LCSD	LCSD										
Surrogate	%Recovery	Qualifier	Limits									
1-Chlorooctane	102		70 - 130									Ì
o-Terphenyl	87		70 - 130									
												ì
Lab Sample ID: 890-3145-A-2	2-D MS							Client	t Sample ID:			
Matrix: Solid										Type: Tot		
Analysis Batch: 36313										Batch:	36321	
	•	Sample	Spike		MS		_	··· _	%Rec			
Analyte		Qualifier	Added		Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics	<50.0	U	998	816.5		mg/Kg		82	70 - 130			
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0		998	810.5		mg/Kg		81	70 - 130			
C10-C28)	~00.0	U	330	010.5		IIIy/rxy		01	10 - 130			
510-0207												
		MS										
Surrogate			Limits									
1-Chlorooctane	77		70 - 130									
o-Terphenyl	73		70 - 130									

Lab Sample ID: 890 Matrix: Solid

Matrix: Solid Analysis Batch: 36313									Prep Prej
-	Sample	Sample	Spike	MSD	MSD				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	999	847.6		mg/Kg		85	70 - 130
Diesel Range Organics (Over C10-C28)	<50.0	U	999	830.8		mg/Kg		83	70 - 130

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	89		70 - 130
o-Terphenyl	74		70 - 130

rep Type: Total/NA Prep Batch: 36321

RPD

4

2

RPD

Limit

20

20

Page 59 of 192

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Project/Site: PLU 21 BD 125H

Client: Ensolum

QC Sample Results

Job ID: 890-3157-1 SDG: 03E1558068

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36393/1-A Matrix: Solid											onent a	Sample ID: Prep	Type: S	
Analysis Batch: 36632												iiop	1900.0	
		мв	МВ											
Analyte	R	esult	Qualifier		RL		Uni	t	D	P	repared	Analy	zed	Dil Fac
Chloride	<	<5.00	U		5.00		mg	′Kg				10/11/22	14:27	
- Lab Sample ID: LCS 880-36393/2-A									Cli	ent	Sample	ID: Lab C	ontrol S	ample
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 36632														
				Spike		LCS	LCS					%Rec		
Analyte				Added			Qualifier	Unit		D	%Rec	Limits		
Chloride				250		257.3		mg/Kg			103	90 - 110		
Lab Sample ID: LCSD 880-36393/3-	A							CI	ient S	am	ple ID:	Lab Contro	ol Sampl	le Dup
Matrix: Solid												Prep	Type: S	oluble
Analysis Batch: 36632														
				Spike		LCSD	LCSD					%Rec		RPD
Analyte				Added			Qualifier	Unit		D	%Rec	Limits	RPD	Limi
Chloride				250		246.5		mg/Kg			99	90 _ 110	4	20
Lab Sample ID: 890-3157-1 MS												Client Sa	mple ID:	: PH0 1
Matrix: Solid												Prep	Type: S	Soluble
Analysis Batch: 36632														
	Sample	Samp	ole	Spike		MS	MS					%Rec		
Analyte	Result	Quali	fier	Added		Result	Qualifier	Unit		D	%Rec	Limits		
Chloride	152			251		391.7		mg/Kg			95	90 - 110		
Lab Sample ID: 890-3157-1 MSD												Client Sa	mple ID:	: PH0 1
-													Type: S	
Matrix: Solid														
Matrix: Solid Analysis Batch: 36632														
	Sample	Samp	ble	Spike		MSD	MSD					%Rec		RPD
	Sample Result			Spike Added			MSD Qualifier	Unit		D	%Rec	%Rec Limits	RPD	RPD Limi

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Released to Imaging: 2/22/2023 2:12:01 PM

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

5

Job ID: 890-3157-1 SDG: 03E1558068

GC VOA

Prep Batch: 36699

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3157-1	PH01	Total/NA	Solid	5035	
890-3157-2	PH01A	Total/NA	Solid	5035	
MB 880-36699/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36699/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36699/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-20232-A-1-A MS	Matrix Spike	Total/NA	Solid	5035	
880-20232-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36717

000-20232-A-1-D M3D	Matrix Spike Dupicate	Total/NA	Solid	5055		0
Analysis Batch: 36717						ð
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	9
890-3157-1	PH01	Total/NA	Solid	8021B	36699	
890-3157-2	PH01A	Total/NA	Solid	8021B	36699	
MB 880-36699/5-A	Method Blank	Total/NA	Solid	8021B	36699	
LCS 880-36699/1-A	Lab Control Sample	Total/NA	Solid	8021B	36699	
LCSD 880-36699/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36699	
880-20232-A-1-A MS	Matrix Spike	Total/NA	Solid	8021B	36699	
880-20232-A-1-B MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36699	
Analysis Batch: 36874						13

Analysis Batch: 36874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3157-1	PH01	Total/NA	Solid	Total BTEX	
890-3157-2	PH01A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 36313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3157-1	PH01	Total/NA	Solid	8015B NM	36321
890-3157-2	PH01A	Total/NA	Solid	8015B NM	36321
MB 880-36321/1-A	Method Blank	Total/NA	Solid	8015B NM	36321
LCS 880-36321/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36321
LCSD 880-36321/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36321
890-3145-A-2-D MS	Matrix Spike	Total/NA	Solid	8015B NM	36321
890-3145-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36321

Prep Batch: 36321

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3157-1	PH01	Total/NA	Solid	8015NM Prep	
890-3157-2	PH01A	Total/NA	Solid	8015NM Prep	
MB 880-36321/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36321/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36321/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3145-A-2-D MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3145-A-2-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3157-1	PH01	Total/NA	Solid	8015 NM	
890-3157-2	PH01A	Total/NA	Solid	8015 NM	

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QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Page 62 of 192

Job ID: 890-3157-1 SDG: 03E1558068

HPLC/IC

Leach Batch: 36393

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3157-1	PH01	Soluble	Solid	DI Leach	
890-3157-2	PH01A	Soluble	Solid	DI Leach	
MB 880-36393/1-A	Method Blank	Soluble	Solid	DI Leach	
_CS 880-36393/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36393/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-3157-1 MS	PH01	Soluble	Solid	DI Leach	
890-3157-1 MSD	PH01	Soluble	Solid	DI Leach	

Analysis Batch: 36632

ab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
390-3157-1	PH01	Soluble	Solid	DI Leach	
390-3157-2	PH01A	Soluble	Solid	DI Leach	
MB 880-36393/1-A	Method Blank	Soluble	Solid	DI Leach	
_CS 880-36393/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
-CSD 880-36393/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
390-3157-1 MS	PH01	Soluble	Solid	DI Leach	
390-3157-1 MSD nalysis Batch: 36632		Soluble	Solid	DI Leach	
390-3157-1 MSD nalysis Batch: 36632			Solid Matrix	DI Leach Method	Prep Batch
390-3157-1 MSD nalysis Batch: 36632 .ab Sample ID 390-3157-1	Client Sample ID PH01	Prep Type Soluble	Matrix Solid	<u>Method</u> 300.0	Prep Batch 36393
390-3157-1 MSD nalysis Batch: 36632 .ab Sample ID 390-3157-1 390-3157-2	Client Sample ID PH01 PH01A	Prep Type Soluble Soluble	Matrix Solid Solid	Method 300.0 300.0	36393 36393
990-3157-1 MSD nalysis Batch: 36632 Lab Sample ID 390-3157-1 390-3157-2 MB 880-36393/1-A	Client Sample ID PH01 PH01A Method Blank	Prep Type Soluble Soluble Soluble	Matrix Solid Solid Solid	Method 300.0 300.0 300.0	36393 36393 36393
390-3157-1 MSD nalysis Batch: 36632 .ab Sample ID 390-3157-1 390-3157-2	Client Sample ID PH01 PH01A	Prep Type Soluble Soluble Soluble Soluble	Matrix Solid Solid Solid Solid Solid	Method 300.0 300.0	36393 36393 36393 36393 36393
390-3157-1 MSD nalysis Batch: 36632 Lab Sample ID 390-3157-1 390-3157-2 VIB 880-36393/1-A LCS 880-36393/2-A LCSD 880-36393/3-A	Client Sample ID PH01 PH01A Method Blank Lab Control Sample Lab Control Sample Dup	Prep Type Soluble Soluble Soluble Soluble Soluble	Matrix Solid Solid Solid Solid Solid Solid	Method 300.0 300.0 300.0 300.0 300.0 300.0 300.0 300.0	36393 36393 36393 36393 36393 36393
390-3157-1 MSD nalysis Batch: 36632 Lab Sample ID 390-3157-1 390-3157-2 MB 880-36393/1-A .CS 880-36393/2-A	Client Sample ID PH01 PH01A Method Blank Lab Control Sample	Prep Type Soluble Soluble Soluble Soluble	Matrix Solid Solid Solid Solid Solid	Method 300.0 300.0 300.0 300.0 300.0 300.0	36393 36393 36393 36393 36393

Job ID: 890-3157-1 SDG: 03E1558068

Lab Sample ID: 890-3157-1 Matrix: Solid

Date Collected: 10/05/22 09:40 Date Received: 10/05/22 15:26

Project/Site: PLU 21 BD 125H

Client Sample ID: PH01

Client: Ensolum

	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	36699	10/11/22 16:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36717	10/12/22 18:27	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36874	10/13/22 11:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36578	10/10/22 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	36321	10/07/22 07:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36313	10/07/22 12:16	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	36393	10/07/22 15:12	СН	EET MID
Soluble	Analysis	300.0		1			36632	10/11/22 14:44	СН	EET MID

Client Sample ID: PH01A Date Collected: 10/05/22 09:45

Date Received: 10/05/22 15:26

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	36699	10/11/22 16:29	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36717	10/12/22 18:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36874	10/13/22 11:47	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36578	10/10/22 12:07	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36321	10/07/22 07:40	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36313	10/07/22 12:38	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	36393	10/07/22 15:12	СН	EET MID
Soluble	Analysis	300.0		1			36632	10/11/22 15:02	CH	EET MID

Laboratory References:

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

5 6

9

Lab Sample ID: 890-3157-2 Matrix: Solid

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Laboratory: Eurofins Midland

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

hority	F	Program	Identification Number	Expiration Date
as	1	NELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report	out the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for
the agency does not o	fer certification.			
• •		Matrix	Analyte	
the agency does not o	fer certification.			

Eurofins Carlsbad

Page 64 of 192

10

Job ID: 890-3157-1

SDG: 03E1558068

Released to Imaging: 2/22/2023 2:12:01 PM Page 15 of 20

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3157-1 SDG: 03E1558068

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
SW846 =	= "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, Ma "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third E = TestAmerica Laboratories, Standard Operating Procedure	•	
Laboratory R			
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Protocol References:

Laboratory References:

Page 66 of 192

Job ID: 890-3157-1 SDG: 03E1558068

Client: Ensolum Project/Site: PLU 21 BD 125H

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3157-1	PH01	Solid	10/05/22 09:40	10/05/22 15:26	1'	4
890-3157-2	PH01A	Solid	10/05/22 09:45	10/05/22 15:26	2'	
						5
						8
						9
						12
						13

.

	Xe	Xenco			유민	Paso, TX	(915) 585- ;75) 392-7	3443, Lubbo 550, Carlsba	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199			
										WWW.X6	www.xenco.com Page	(of (
Project Manager: K	Kalei Jennings			B	Bill to: (if different)		Garret Green	reen		Wor	Work Order Comments	
	Ensolum			0	Company Name		XTO Energy	rgy		Program: UST/PST 🗌 PRP 🗍 Brownfields 🗍 RRC	P Brownfields RR	RC Superfund
	3122 National Parks Hwy	arks Hwy		A	Address:		3104 E. Green St	Green St.		State of Project:		
le ZIP:	Carlsbad, NM 88220	8220		c	City, State ZIP:		Carlsbad	Carlsbad, NM 88220		Reporting: Level II DLevel III PST/UST TRRP	III PST/UST TR	
	303-887-2946			Email: G	Email: Garret.Green@ExxonMobil.com	n@Exxo	nMobil.c	mo.		Deliverables: EDD	ADaPT D Oth	Other:
Name:	PLU 21	PLU 21 BD 125H	_	Turn Around	round	-			ANALYSIS REQUEST	UEST	Preser	Preservative Codes
Project Number:	03E1	03E1558068	2	Routine [Rush	Pres. Code					None: NO	DI Water: H ₂ O
Project Location:	32.10974, -103.88422	-103.8842		Due Date:							Cool: Cool	MeOH: Me
Sampler's Name:	Kase	Kase Parker		T starts the d	TAT starts the day received by	Y					HCL: HC	HNO3: HN
PO#			the	e lab, if receiv	the lab, if received by 4:30pm						H ₂ S0 ₄ : H ₂	NaOH: Na
SAMPLE RECEIPT	T Temp Blank:	ank: (Yes	8 V	Wet Ice: (Yes No	nete	.0)				H ₃ PO ₄ : HP	
Samples Received Intact:	1	No The	Thermometer ID:	_	Nucor	iran	300				NaHSO4: NABIS	ABIS
Cooler Custody Seals:	Yes No	NIA COI	Correction Factor:		2.0.2	Pa	PA:				Na2S2O3: NASO3	aSU ₃
Sample Custody Seals:	s: Yes No	N/A Ter	Temperature Reading:	-	21.4	1	S (E	1	890-3157 Chain o	hain of Custody	Zn Acetate+NaOH: Zn	NaOH: Zn
Fotal Containers:		0	Corrected Temperature:		21.0		_		-		14001111000	
Sample Identification	ification	Matrix Sa	Date Sampled Sa	Time I Sampled	Depth Grab/ Comp	b/ # of np Cont	CHLOF	TPH (8 BTEX (Samp	Sample Comments
PH01		S 10	10/5/2022	9:40 1	9	1	×	× ×			Incident ID:	
PH01A	4	_				-	-	x x			NAPP	NAPP2214547737
1				-		_					Cost Center:	1.
											16	1666421001
				4	_	_					AFE:	
					_	1	K	9				
						\parallel	\prod					
		_	_		+							
Tota! 200.7 / 6010	0 200.8 / 6020:	20:	8RC	RA 13PPM	M Texas 11		Sb As E	Ba Be B (r Co Cu Fe	Ni K Se A	y SiO ₂ Na Sr TI Sn	UVZn
Circle Method(s) and Metal(s) to be analyzed	d Metal(s) to be	analyzed	mplae constitut	CLP / SPI	tes a valid nurchase order from client	om client o	omnany to	COMPANY to Eurofins Xenco. Its affilia	co. Its amiliates and subcontractors.	ractors. It assigns standard terms and conditions	inditions	
Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurorns Aenco, its annutes and soucout 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 i 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	will be liable only for num charge of \$85.0	ishment of sa or the cost of o will be appl	imples constitut samples and sh led to each proj	tes a valid pur lali not assum lect and a cha	rge of \$5 for e	tibility for a ach sample	ny losses of submitted	r expenses in to Eurofins X	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Euronia Aetico, its anilates and succontractors, it assigns seriored terms and contractors of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of service. 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 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 of the control of the term of the control of the control of the control of the term of terms of the term of the term of term of terms of term	 It assigns standard family and control the due to circumstances beyond the senforced unless previously 	r negotlated.	
Refinquished by-	(Signature)		Received by	d by: (Signature)	re)		Date/Time	ne	Relinquished by: (Signature)	ure) Received by: (Signature)	(Signature)	Date/Time
1	m					10	3	3.2.33 1526				
З				d		-		4				

4

11 12 13

Houston, TX (281) 240-4200, Dailas, TX (214) 902-0300 Chain of Custody

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3157 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Job Number: 890-3157-1 SDG Number: 03E1558068

14

Job Number: 890-3157-1 SDG Number: 03E1558068

List Source: Eurofins Midland

List Creation: 10/07/22 11:00 AM

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3157 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	

Eurofins Carlsbad Released to Imaging: 2/22/2023 2:12:01 PM Received by OCD: 11/30/2022 7:27:20 AM

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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: 890-3245-1

Laboratory Sample Delivery Group: 03E1558068 Client Project/Site: PLU 21 BD 125H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/26/2022 7:57:52 AM Jessica Kramer, Project Manager (432)704-5440 Jessica.Kramer@et.eurofinsus.com of 192

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

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

Page 71 of 192

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	10
QC Sample Results	11
QC Association Summary	17
Lab Chronicle	20
Certification Summary	22
Method Summary	23
Sample Summary	24
Chain of Custody	25
Receipt Checklists	26

Definitions/Glossary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3245-1

Project/Site: PL	LU 21 BD 125H SDG: 03E155806	8 2
Qualifiers		- 3
GC VOA		
Qualifier	Qualifier Description	
 F1	MS and/or MSD recovery exceeds control limits.	-
U	Indicates the analyte was analyzed for but not detected.	5
GC Semi VOA		
Qualifier	Qualifier Description	
<u>U</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.	- 8
Glossary		-
		- 9
Abbreviation ¤	These commonly used abbreviations may or may not be present in this report.	- 10
%R	Listed under the "D" column to designate that the result is reported on a dry weight basis 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)	13
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	
NEG	Negative / Absent	
POS	Positive / Present	
PQL	Practical Quantitation Limit	
PRES	Presumptive	
QC	Quality Control	
RER	Relative Error Ratio (Radiochemistry)	
RL	Reporting Limit or Requested Limit (Radiochemistry)	
RPD	Relative Percent Difference, a measure of the relative difference between two points	

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

TEF

TEQ

TNTC
Page 73 of 192

4

Job ID: 890-3245-1 SDG: 03E1558068

Job ID: 890-3245-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3245-1

Receipt

The samples were received on 10/20/2022 9:38 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.6° C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: PH02 (890-3245-1), PH02A (890-3245-2), PH03 (890-3245-3), PH03A (890-3245-4), PH04 (890-3245-5) and PH04A (890-3245-6).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-37670 and analytical batch 880-37766 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

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.

Job ID: 890-3245-1 SDG: 03E1558068

Client Sample ID: PH02

Project/Site: PLU 21 BD 125H

Date Collected: 10/18/22 10:35 Date Received: 10/20/22 09:38

Sample Depth: 1'

o-Xylene

Surrogate

Xylenes, Total

4-Bromofluorobenzene (Surr)

Released to Imaging: 2/22/2023 2:12:01 PM

Client: Ensolum

Lab Sample ID: 890-3245-1

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 09:35	10/24/22 11:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	94		70 - 130			10/24/22 09:35	10/24/22 11:40	1
1,4-Difluorobenzene (Surr)	93		70 - 130			10/24/22 09:35	10/24/22 11:40	1
Method: TAL SOP Total BTEX - T	otal BTEX Calo	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/24/22 16:42	1
Method: SW846 8015 NM - Diese	I Range Organ	ics (DRO) (GC)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1
Method: SW846 8015B NM - Dies	el Range Orga	nics (DRO)	(GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/21/22 23:31	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/21/22 23:31	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/21/22 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			10/21/22 13:46	10/21/22 23:31	1
o-Terphenyl	118		70 - 130			10/21/22 13:46	10/21/22 23:31	1
Method: MCAWW 300.0 - Anions	, Ion Chromato	ography - So	pluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	141		5.01	mg/Kg			10/23/22 18:14	1
lient Sample ID: PH02A						Lab San	nple ID: 890-	3245-2
ate Collected: 10/18/22 10:40							Matri	x: Solid
ate Received: 10/20/22 09:38								
ample Depth: 2'								
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC))					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			0.00199	mg/Kg		10/24/22 09:35	10/24/22 12:00	1
	<0.00199	U	0.00199	ing/itg		10/2 1/22 00:00	10/24/22 12:00	
Benzene	<0.00199 <0.00199		0.00199	mg/Kg		10/24/22 09:35	10/24/22 12:00	
Benzene Toluene		U						1
Benzene Toluene Ethylbenzene m-Xylene & p-Xylene	<0.00199	U U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 12:00	י 1 1 1

<0.00199 U

<0.00398 U

%Recovery Qualifier

117

0.00199

0.00398

Limits

70 - 130

mg/Kg

mg/Kg

Eurofins Carlsbad

1

1

1

Dil Fac

10/24/22 09:35

10/24/22 09:35

Prepared

10/24/22 09:35

10/24/22 12:00

10/24/22 12:00

Analyzed

10/24/22 12:00

Client Sample Results

Job ID: 890-3245-1 SDG: 03E1558068

Matrix: Solid

5

Client Sample ID: PH02A

Date Collected: 10/18/22 10:40 Date Received: 10/20/22 09:38

Project/Site: PLU 21 BD 125H

Sample Depth: 2'

Client: Ensolum

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

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	81		70 - 130			10/24/22 09:35	10/24/22 12:00	
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/24/22 16:42	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
							10/01/00 10 00	
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1
				mg/Kg			10/24/22 12:22	1
Method: SW846 8015B NM - Dies	sel Range Orga			mg/Kg Unit	D	Prepared	10/24/22 12:22 Analyzed	Dil Fa
Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	sel Range Orga	nics (DRO) Qualifier	(GC)		<u>D</u>	Prepared 10/21/22 13:46		Dil Fa
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	sel Range Orga Result	Qualifier	(GC) RL	Unit	<u>D</u>	· · · · · · · · · · · · · · · · · · ·	Analyzed	Dil Fa
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	sel Range Orga Result <49.9	Qualifier	(GC) <u>RL</u> 49.9	Unit mg/Kg	<u>D</u>	10/21/22 13:46	Analyzed	Dil Fa
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	sel Range Orga Result <49.9	nics (DRO) Qualifier U	(GC) <u>RL</u> 49.9	Unit mg/Kg	<u> </u>	10/21/22 13:46	Analyzed	Dil Fa
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	sel Range Orga Result <49.9 <49.9	nics (DRO) Qualifier U U U	(GC) <u>RL</u> 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	10/21/22 13:46	Analyzed 10/21/22 23:52 10/21/22 23:52	Dil Fac
Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Orga Result <49.9 <49.9 <49.9	nics (DRO) Qualifier U U U	(GC) <u>RL</u> 49.9 49.9 49.9	Unit mg/Kg mg/Kg	<u>D</u>	10/21/22 13:46 10/21/22 13:46 10/21/22 13:46	Analyzed 10/21/22 23:52 10/21/22 23:52 10/21/22 23:52	

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble								
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Chloride	35.9	4.99	mg/Kg			10/23/22 18:28	1

Client Sample ID: PH03

Date Collected: 10/18/22 10:50 Date Received: 10/20/22 09:38 Sample Depth: 1'

Method: SW846 8021B - Volatile Organic Compounds (GC) Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 10/24/22 09:35 10/24/22 12:21 Toluene <0.00200 U 0.00200 10/24/22 09:35 10/24/22 12:21 mg/Kg 1 Ethylbenzene <0.00200 U 0.00200 mg/Kg 10/24/22 09:35 10/24/22 12:21 0.00399 10/24/22 12:21 m-Xylene & p-Xylene <0.00399 U mg/Kg 10/24/22 09:35 1 o-Xylene <0.00200 U 0.00200 mg/Kg 10/24/22 09:35 10/24/22 12:21 1 Xylenes, Total <0.00399 U 0.00399 mg/Kg 10/24/22 09:35 10/24/22 12:21 1 %Recovery Qualifier Limits Dil Fac Surrogate Prepared Analvzed 96 70 - 130 10/24/22 09:35 4-Bromofluorobenzene (Surr) 10/24/22 12:21 1 1,4-Difluorobenzene (Surr) 93 70 - 130 10/24/22 09:35 10/24/22 12:21 1 Method: TAL SOP Total BTEX - Total BTEX Calculation Analyte **Result Qualifier** RL Unit D Dil Fac Prepared Analyzed Total BTEX <0.00399 Ū 0.00399 10/24/22 16:42 mg/Kg 1 Method: SW846 8015 NM - Diesel Range Organics (DRO) (GC) Analyte Result Qualifier RL Unit D Prepared Analvzed Dil Fac

	Q aa	=	•	 	,, _	2	
<50.0	U	50.0	mg/Kg		10/24/22 12:22	1	

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Lab Sample ID: 890-3245-3

Matrix: Solid

Lab Sample ID: 890-3245-2

Total TPH

Job ID: 890-3245-1 SDG: 03E1558068

Matrix: Solid

Lab Sample ID: 890-3245-3

10/22/22 00:14

10/21/22 13:46

Client Sample ID: PH03

Project/Site: PLU 21 BD 125H

Date Collected: 10/18/22 10:50 Date Received: 10/20/22 09:38

Sample Depth: 1'

Client: Ensolum

_ Method: SW846 8015B NM - Dies	sel Range Orga	nics (DRO)	(GC)				
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 00:14
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 00:14
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/21/22 13:46	10/22/22 00:14
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed
1-Chlorooctane	86		70 - 130			10/21/22 13:46	10/22/22 00:14

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

102

126

Method: MCAWW 500.0 - Amons, I	on Chromato	graphy - So	luble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	63.2		4.98	mg/Kg			10/23/22 18:33	1

70 - 130

Client Sample ID: PH03A

Date Collected: 10/18/22 10:55 Date Received: 10/20/22 09:38

Sample Depth: 2'

o-Terphenyl

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/24/22 09:35	10/24/22 12:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			10/24/22 09:35	10/24/22 12:41	1
1,4-Difluorobenzene (Surr)	94		70 - 130			10/24/22 09:35	10/24/22 12:41	1
-								
Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)					
	• •	<mark>ics (DRO) (</mark> Qualifier	GC) RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte	• •	Qualifier	· ·	Unit mg/Kg	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result <50.0	Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <50.0	Qualifier U			<u>D</u> 	Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <50.0	Qualifier U Inics (DRO) Qualifier	RL 50.0	mg/Kg		<u>.</u>	10/24/22 12:22	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10	Result <50.0 sel Range Orga Result	Qualifier U mics (DRO) Qualifier U	(GC) RL	mg/Kg Unit		Prepared	10/24/22 12:22 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Orga Result Sel Range Orga Result <50.0	Qualifier U mics (DRO) Qualifier U	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg		Prepared 10/21/22 13:46	Analyzed 10/22/22 00:35	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Orga Result Sel Range Orga Result <50.0	Qualifier U D Qualifier U U	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg		Prepared 10/21/22 13:46	Analyzed 10/22/22 00:35	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <50.0 sel Range Orga Result <50.0 <50.0	Qualifier U Qualifier Qualifier U U U	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:46 10/21/22 13:46	Analyzed 10/22/22 00:35 10/22/22 00:35	

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10/22/22 00:35

10/21/22 13:46

5 Dil Fac 1 Dil Fac 1 1 Lab Sample ID: 890-3245-4 Matrix: Solid

1

1

o-Terphenyl

70 - 130

		Clien	t Sample Re	sults				
Client: Ensolum							Job ID: 890	
Project/Site: PLU 21 BD 125H							SDG: 03E	1558068
Client Sample ID: PH03A						Lab San	nple ID: 890-	3245-4
Date Collected: 10/18/22 10:55								x: Solid
Date Received: 10/20/22 09:38								
Sample Depth: 2'								
		ana aka a	eluble.					
Method: MCAWW 300.0 - Anions Analyte	1	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32.6		5.03	mg/Kg			10/23/22 18:48	1
Client Sample ID: PH04						l ah San	nple ID: 890-	3215-5
						Lap San	-	
Date Collected: 10/18/22 11:00							watr	x: Solid
Date Received: 10/20/22 09:38								
Sample Depth: 1'								
Method: SW846 8021B - Volatile	Organic Comp	ounds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
Toluene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/24/22 09:35	10/24/22 15:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			10/24/22 09:35	10/24/22 15:46	1
1,4-Difluorobenzene (Surr)	75		70 - 130			10/24/22 09:35	10/24/22 15:46	1
 Method: TAL SOP Total BTEX - 1	Total BTEX Cal	culation						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398		0.00398	mg/Kg			10/25/22 12:00	1
 Method: SW846 8015 NM - Diese			60)					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/24/22 12:22	1
_ Method: SW846 8015B NM - Die	col Bango Orga							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics			49.9	mg/Kg		10/21/22 13:46	10/22/22 00:57	1
(GRO)-C6-C10		5	10.0			. 5/2 1/22 10.70		
Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 00:57	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/21/22 13:46	10/22/22 00:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			10/21/22 13:46	10/22/22 00:57	1
o-Terphenyl	100		70 - 130			10/21/22 13:46	10/22/22 00:57	1
 Method: MCAWW 300.0 - Anions	s. Ion Chromato	ography - S	oluble					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42.0		5.04	mg/Kg			10/23/22 18:52	1

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

Job ID: 890-3245-1 SDG: 03E1558068

Client Sample ID: PH04A

Date Collected: 10/18/22 11:05 Date Received: 10/20/22 09:38

Project/Site: PLU 21 BD 125H

Sample Depth: 2'

Chloride

Client: Ensolum

Lab Sample ID: 890-3245-6

Matrix: Solid

5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U F1	0.00202	mg/Kg		10/24/22 12:42	10/25/22 13:09	1
Toluene	<0.00202	U F1	0.00202	mg/Kg		10/24/22 12:42	10/25/22 13:09	
Ethylbenzene	<0.00202	U F1	0.00202	mg/Kg		10/24/22 12:42	10/25/22 13:09	1
m-Xylene & p-Xylene	<0.00403	U F1	0.00403	mg/Kg		10/24/22 12:42	10/25/22 13:09	
o-Xylene	<0.00202	U F1	0.00202	mg/Kg		10/24/22 12:42	10/25/22 13:09	
Xylenes, Total	<0.00403	U F1	0.00403	mg/Kg		10/24/22 12:42	10/25/22 13:09	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			10/24/22 12:42	10/25/22 13:09	
1,4-Difluorobenzene (Surr)	87		70 - 130			10/24/22 12:42	10/25/22 13:09	
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	ulation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
			0.00402	mg/Kg			10/25/22 16:54	-
Method: SW846 8015 NM - Diese	•••		0.00403 GC) RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH	el Range Organ Result <49.9	<mark>ics (DRO) ((</mark> Qualifier ∪	GC) 		D	Prepared		Dil Fa
Method: SW846 8015 NM - Diese Analyte ^{Total} TPH Method: SW846 8015B NM - Dies	el Range Organ 	ics (DRO) ((Qualifier U nics (DRO)	GC) <u> RL</u> 49.9 (GC)	Unit mg/Kg	D		Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	el Range Organ 	ics (DRO) ((Qualifier U nics (DRO) Qualifier	GC) 	Unit		Prepared Prepared 10/21/22 13:46	Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	el Range Organ Result <49.9 sel Range Orga Result	ics (DRO) ((Qualifier U nics (DRO) Qualifier U	GC)	Unit mg/Kg Unit		Prepared	Analyzed 10/24/22 12:22 Analyzed	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	el Range Organ Result <49.9 sel Range Orga Result <49.9	ics (DRO) ((Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> 49.9 (GC) <u>RL</u> 49.9 	Unit mg/Kg		Prepared 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 01:18	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	el Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9	ics (DRO) ((Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> (GC) <u>RL</u> 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:46 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 01:18 10/22/22 01:18	Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	el Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9	ics (DRO) ((Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> 49.9 (GC) <u>RL</u> 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 01:18 10/22/22 01:18	Dil Fa Dil Fa
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	el Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9 <49.9	ics (DRO) ((Qualifier U nics (DRO) Qualifier U U	GC) <u>RL</u> 49.9 (GC) <u>RL</u> 49.9 49.9 49.9 <u>Limits</u>	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46 Prepared	Analyzed 10/24/22 12:22 Analyzed 10/22/22 01:18 10/22/22 01:18 10/22/22 01:18 Analyzed	Dil Fa Dil Fa
Total BTEX Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: MCAWW 300.0 - Anions	el Range Organ <u>Result</u> <49.9 sel Range Orga <u>Result</u> <49.9 <49.9 <49.9 <49.9 <82 96	ics (DRO) ((Qualifier U nics (DRO) Qualifier U U Qualifier	GC) <u>RL</u> 49.9 (GC) <u>RL</u> 49.9 49.9 49.9 <u>Limits</u> 70 - 130 70 - 130	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/21/22 13:46 10/21/22 13:46 10/21/22 13:46 Prepared 10/21/22 13:46	Analyzed 10/24/22 12:22 Analyzed 10/22/22 01:18 10/22/22 01:18 10/22/22 01:18 Analyzed 10/22/22 01:18	Dil Fa Dil Fa

4.98

mg/Kg

22.5

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10/23/22 18:57

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3211-A-3-E MS	Matrix Spike	105	107	·
890-3211-A-3-F MSD	Matrix Spike Duplicate	122	90	
890-3245-1	PH02	94	93	
890-3245-2	PH02A	117	81	
890-3245-3	PH03	96	93	
890-3245-4	PH03A	99	94	
890-3245-5	PH04	87	75	
890-3245-6	PH04A	110	87	
890-3245-6 MS	PH04A	96	97	
890-3245-6 MSD	PH04A	99	94	
LCS 880-37622/1-A	Lab Control Sample	100	103	
LCS 880-37670/1-A	Lab Control Sample	116	108	
LCSD 880-37622/2-A	Lab Control Sample Dup	117	95	
LCSD 880-37670/2-A	Lab Control Sample Dup	119	107	
MB 880-37622/5-A	Method Blank	87	93	
MB 880-37670/5-A	Method Blank	77	101	
Surrogate Legend				
BFB = 4-Bromofluorobe	nzene (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Client Sample ID

Matrix Spike Duplicate

Lab Control Sample Dup

Method Blank

Matrix Spike

PH02

Matrix: Solid

Lab Sample ID

890-3245-1

890-3237-A-1-B MS

890-3237-A-1-C MSD

Percent Surrogate Recovery (Acceptance Limits) 1CO1 OTPH1 (70-130) (70-130) 91 84 83 89 102 118

890-3245-2	PH02A	83	98
890-3245-3	PH03	86	102
890-3245-4	PH03A	110	126
890-3245-5	PH04	84	100
890-3245-6	PH04A	82	96
LCS 880-37501/2-A	Lab Control Sample	97	120

Surrogate Legend

LCSD 880-37501/3-A

MB 880-37501/1-A

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Prep Type: Total/NA

Job ID: 890-3245-1 SDG: 03E1558068

96

90

116

108

5

Prep Type: Total/NA

Client Sample ID: Method Blank

Project/Site: PLU 21 BD 125H Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 37616

Client: Ensolum

Analysis Batch: 37616							Prep Batch	n: 37622
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/24/22 09:35	10/24/22 10:58	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			10/24/22 09:35	10/24/22 10:58	1
1,4-Difluorobenzene (Surr)	93		70 - 130			10/24/22 09:35	10/24/22 10:58	1

Lab Sample ID: LCS 880-37622/1-A Matrix: Solid

Analysis Batch: 37616

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09878		mg/Kg		99	70 - 130	
Toluene	0.100	0.09273		mg/Kg		93	70 - 130	
Ethylbenzene	0.100	0.09307		mg/Kg		93	70 - 130	
m-Xylene & p-Xylene	0.200	0.1928		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09522		mg/Kg		95	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	100		70 - 130
1,4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: LCSD 880-37622/2-A

Matrix: Solid

Analysis Batch: 37616							Prep	Batch:	37622
	Spike	LCSD L	CSD				%Rec		RPD
Analyte	Added	Result C	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1046		mg/Kg		105	70 - 130	6	35
Toluene	0.100	0.1043		mg/Kg		104	70 - 130	12	35
Ethylbenzene	0.100	0.1118		mg/Kg		112	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.2373		mg/Kg		119	70 - 130	21	35
o-Xylene	0.100	0.1176		mg/Kg		118	70 - 130	21	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

Lab Sample ID: 890-3211-A-3-E MS Matrix: Solid

aluaia Patahi 27646

Analysis Batch: 37616									Prep	Batch: 37622
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0998	0.09725		mg/Kg		97	70 - 130	
Toluene	<0.00200	U	0.0998	0.08867		mg/Kg		89	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

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

Client Sample ID: Lab Control Sample Dup

Prep Batch: 37622

Prep Type: Total/NA

Page 11 of 27	

Lab Sample ID: 890-3211-A-3-E MS

QC Sample Results

MS MS

0.08819

0.1815

0.08871

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

Spike

Added

0.0998

0.200

0.0998

Limits 70 - 130

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 125H

Matrix: Solid

Analyte

o-Xylene

Surrogate

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 37616

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

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

Sample Sample

<0.00200

<0.00401 U

<0.00200 U

105

107

%Recovery

Result Qualifier

U

MS MS

Qualifier

Job ID: 890-3245-1 SDG: 03E1558068

Prep Type: Total/NA

Prep Batch: 37622

Client Sample ID: Matrix Spike

7

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

Client Sample ID: Method Blank

10/25/22 12:43

10/25/22 12:43

Client Sample ID: Lab Control Sample

10/24/22 12:42

10/24/22 12:42

Prep Type: Total/NA

Prep Batch: 37670

%Rec

Limits

70 - 130

70 - 130

70 - 130

%Rec

88

91

89

D

Lab Sample ID: 890-3211-A-3-F MSD Matrix: Solid nalysis Batch: 37616

Analysis Batch: 37616									Prep	Batch:	37622	
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	<0.00200	U	0.0990	0.08785		mg/Kg		89	70 - 130	10	35	
Toluene	<0.00200	U	0.0990	0.08833		mg/Kg		89	70 - 130	0	35	ī
Ethylbenzene	<0.00200	U	0.0990	0.09287		mg/Kg		94	70 - 130	5	35	
m-Xylene & p-Xylene	<0.00401	U	0.198	0.1989		mg/Kg		100	70 - 130	9	35	ī
o-Xylene	<0.00200	U	0.0990	0.09869		mg/Kg		100	70 - 130	11	35	

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	122		70 - 130
1,4-Difluorobenzene (Surr)	90		70 - 130

Lab Sample ID: MB 880-37670/5-A Matrix: Solid Analysis Batch: 37766

	IVIB	IVIB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/24/22 12:42	10/25/22 12:43	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

4-Bromofluorobenzene (Surr)	77	70 - 130
1,4-Difluorobenzene (Surr)	101	70 - 130

Lab Sample ID: LCS 880-37670/1-A Matrix: Solid Analysis Batch: 37766

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.1123		mg/Kg		112	70 - 130
Toluene	0.100	0.09322		mg/Kg		93	70 - 130
Ethylbenzene	0.100	0.1074		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.2065		mg/Kg		103	70 - 130

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 37670

Page 81 of 192

Released to Imaging: 2/22/2023 2:12:01 PM

1

Lab Sample ID: LCS 880-37670/1-A

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Matrix: Solid

Job ID: 890-3245-1 SDG: 03E1558068

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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

Matrix: Solid									Prep I	ype: 10	tai/NA
Analysis Batch: 37766									Prep	Batch:	37670
			Spike	LCS	LCS				%Rec		
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits		
o-Xylene			0.100	0.1048		mg/Kg		105	70 - 130		
	LCS	LCS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	116		70 - 130								
1,4-Difluorobenzene (Surr)	108		70 - 130								
Lab Sample ID: LCSD 880-3767	0/2-A					Clie	nt Sam	nle ID:	Lab Contro	l Sample	e Dun
Matrix: Solid										ype: Tot	
Analysis Batch: 37766										Batch:	
			Spike	LCSD	LCSD				%Rec		RPD
Analyte			Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene			0.100	0.1079		mg/Kg		108	70 - 130	4	35
Toluene			0.100	0.1010		mg/Kg		100	70 - 130	8	35
Ethylbenzene			0.100	0.1096		mg/Kg		110	70 - 130	2	35
m-Xylene & p-Xylene			0.200	0.2105		mg/Kg		105	70 - 130	2	35
o-Xylene			0.100	0.1041		mg/Kg		103	70 - 130	1	35
0-Aylene			0.100	0.1041		mg/ng		104	70 - 150		55
	LCSD	LCSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	119		70 - 130								
1,4-Difluorobenzene (Surr)	107		70 - 130								
-											
Lab Sample ID: 890-3245-6 MS									Client Sam	ple ID: P	PH04A
Matrix: Solid									Prep T	ype: Tot	tal/NA
Analysis Batch: 37766									Prep	Batch:	37670
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Benzene	<0.00202	U F1	0.100	0.07948		mg/Kg		79	70 - 130		
Toluene	<0.00202	U F1	0.100	0.05553	F1	mg/Kg		55	70 - 130		
Ethylbenzene	<0.00202	U F1	0.100	0.06373	F1	mg/Kg		63	70 - 130		
m-Xylene & p-Xylene	<0.00403	U F1	0.201	0.1228	F1	mg/Kg		61	70 - 130		
o-Xylene	<0.00202	U F1	0.100	0.06434	F1	mg/Kg		64	70 - 130		
	MS	MS									
Surrogate	%Recovery		Limits								
4-Bromofluorobenzene (Surr)	96	Quanner	70 - 130								
1,4-Difluorobenzene (Surr)	97		70 - 130 70 - 130								
	57		10-100								
Lab Sample ID: 890-3245-6 MSE)								Client Sam	ple ID: P	PH04A
Matrix: Solid										ype: Tot	
Analysis Batch: 37766										Batch:	
·····,····	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	-	Qualifier	Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00202		0.0990	0.06153		mg/Kg		62	70 - 130	25	35
Toluene	< 0.00202		0.0990	0.06050		mg/Kg		61	70 - 130	9	35
Ethylbenzene	<0.00202		0.0990	0.06411		mg/Kg		65	70 - 130 70 - 130	1	35
	<0.00202		0.198	0.1216		mg/Kg		61	70 - 130	· · · · · · · · · · · · · · · · · · ·	35
m-Xylene & p-Xylene o-Xylene	<0.00403		0.0990	0.05910		mg/Kg		60	70 - 130	8	35

QC Sample Results

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

Lab Sample ID: 890-3245-6 MSI	כ								C	lient Sampl		
Matrix: Solid										Prep Ty	-	
Analysis Batch: 37766										Prep E	Batch:	3767
	MSD MS	SD										
Surrogate	%Recovery Qu	alifier	Limits									
4-Bromofluorobenzene (Surr)	99		70 - 130									
1,4-Difluorobenzene (Surr)	94		70 - 130									
lethod: 8015B NM - Diesel	Range Orga	nics (D	RO) (GC)									
Lab Sample ID: MB 880-37501/1	1-A								Client Sa	ample ID: M	ethod	Blan
Matrix: Solid										Prep Ty		
Analysis Batch: 37440										Prep E	-	
-	М	в мв										
Analyte	Resu	It Qualifier	RL		Unit		D	Pi	epared	Analyzed	ł	Dil Fa
Gasoline Range Organics	<50.	0 U	50.0		mg/K	g	_	10/2	1/22 13:46	10/21/22 20		
(GRO)-C6-C10					-							
Diesel Range Organics (Over	<50.	0 U	50.0		mg/K	g		10/2	1/22 13:46	10/21/22 20	:18	
C10-C28)	-=0	0 11	50.0			_		10/0	1/00 40 40	40/04/00 00	40	
Oll Range Organics (Over C28-C36)	<50.	υU	50.0		mg/K	g		10/2	1/22 13:46	10/21/22 20	:18	
	м	B MB										
Surrogate	%Recover	y Qualifier	Limits					PI	repared	Analyzed	d	Dil Fa
1-Chlorooctane	9	0	70 - 130					10/2	1/22 13:46	10/21/22 20):18	
p-Terphenyl	10	8	70 - 130					10/2	1/22 13:46	10/21/22 20):18	
o-Terphenyl	10	8	70 - 130					10/2	1/22 13:46	10/21/22 20):18	
		8	70 - 130				C			ID: Lab Cor	ntrol S	
Lab Sample ID: LCS 880-37501/		8	70 - 130				C				ntrol S	
Lab Sample ID: LCS 880-37501/ Matrix: Solid		8	70 _ 130				C			ID: Lab Cor	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid		8	70 - 130 Spike	LCS	LCS		C			ID: Lab Cor Prep Ty	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440		8			LCS Qualifier	Unit	C			ID: Lab Cor Prep Ty Prep E	ntrol S pe: To	tal/N
o- <i>Terphenyl</i> Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics		8	Spike			- Unit mg/Kg	C	lient	Sample	ID: Lab Cor Prep Ty Prep E %Rec	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics (GRO)-C6-C10		8	Spike Added 1000	Result 1112		mg/Kg	C	lient	Sample %Rec 111	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over		8	Spike Added	Result			C	lient	Sample %Rec	ID: Lab Cor Prep Ty Prep E %Rec Limits	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics GRO)-C6-C10 Diesel Range Organics (Over			Spike Added 1000	Result 1112		mg/Kg	C	lient	Sample %Rec 111	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	/2-A		Spike Added 1000	Result 1112		mg/Kg	c	lient	Sample %Rec 111	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 ^{Analyte}	/2-A		Spike Added 1000 1000	Result 1112		mg/Kg	C	lient	Sample %Rec 111	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane	LCS LC %Recovery Qu		Spike Added 1000 1000 <i>Limits</i>	Result 1112		mg/Kg	c	lient	Sample %Rec 111	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130	ntrol S pe: To	tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane p-Terphenyl	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 Limits 70 - 130	Result 1112		mg/Kg mg/Kg		<u>D</u>	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130	ntrol S pe: To Batch:	le Du
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane p-Terphenyl Lab Sample ID: LCSD 880-3750	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 Limits 70 - 130	Result 1112		mg/Kg mg/Kg		<u>D</u>	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130	ntrol S pe: To Batch:	le Du
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: LCSD 880-3750 Matrix: Solid	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 Limits 70 - 130	Result 1112		mg/Kg mg/Kg		<u>D</u>	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130	ntrol S pe: To Batch: Sampl pe: To	le Du tal/N
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 Limits 70 - 130	Result 1112 1053		mg/Kg mg/Kg		<u>D</u>	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130	ntrol S pe: To Batch: Sampl pe: To	le Du
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: LCSD 880-3750 Matrix: Solid	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 1000 0.1000 Limits 70 - 130 70 - 130	Result 1112 1053	Qualifier	mg/Kg mg/Kg		<u>D</u>	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130	ntrol S pe: To Batch: Sampl pe: To	le Du tal/N 3750
Lab Sample ID: LCS 880-37501/ Matrix: Solid Analysis Batch: 37440 Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Surrogate 1-Chlorooctane o-Terphenyl Lab Sample ID: LCSD 880-3750 Matrix: Solid Analysis Batch: 37440	/2-A LCS LC %Recovery Qu 97 120		Spike Added 1000 1000 1000 0.1000 Limits 70 - 130 70 - 130 Spike	Result 1112 1053	Qualifier	mg/Kg mg/Kg Cl		lient	Sample %Rec 111 105	ID: Lab Cor Prep Ty Prep E %Rec Limits 70 - 130 70 - 130 70 - 130 70 - 130 70 - 190 70 - 190	Sampl pe: To Satch: Satch: Satch:	le Du tal/N 3750 3750 RF

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	96		70 - 130
o-Terphenyl	116		70 - 130

Job ID: 890-3245-1 SDG: 03E1558068

Lab Sample ID: 890-3237-A-1-B MS

QC Sample Results

MS MS

1078

1006

Result Qualifier

Unit

mg/Kg

mg/Kg

D

%Rec

105

87

Spike

Added

998

998

Limits 70 - 130

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 125H

Matrix: Solid

(GRO)-C6-C10

Analyte

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 37440

Gasoline Range Organics

Diesel Range Organics (Over

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

Sample Sample

<49.8 U

133

MS MS

%Recovery Qualifier

84

91

Result Qualifier

Prep Type: Total/NA

Prep Batch: 37501

Client Sample ID: Matrix Spike

%Rec

Limits

70 - 130

70 - 130

5
7
8
9

Lab Sample ID: 890-3237-A Matrix: Solid	-1-C MSD					CI	ient Sa	ample IE): Matrix Sp Bron 1	oike Dup Type: To	
Analysis Batch: 37440										Batch:	
Analysis Daten. 57440	Sample	Sample	Spike	MSD	MSD				%Rec	Daten.	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.8	U	998	1136		mg/Kg		111	70 - 130	5	20
(GRO)-C6-C10											
Diesel Range Organics (Over	133		998	1003		mg/Kg		87	70 - 130	0	20
C10-C28)											
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	83		70 - 130								
o-Terphenyl	89		70 - 130								

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-37510/1-A Matrix: Solid Analysis Batch: 37597									Client S	Sample ID: N Prep T		Blank oluble
· · · · · · · · · · · · · · · · · · ·	МВ	МВ										
Analyte	Result	Qualifier		RL		Unit		DI	Prepared	Analyze	d	Dil Fac
Chloride	<5.00	U		5.00		mg/K	g			10/23/22 1	6:51	1
Lab Sample ID: LCS 880-37510/2-A								Clien	t Sample	e ID: Lab Co	ntrol S	ample
Matrix: Solid										Prep 1	ype: S	oluble
Analysis Batch: 37597												
			Spike		LCS	LCS				%Rec		
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits		
Chloride			250		258.4		mg/Kg		103	90 - 110		
Lab Sample ID: LCSD 880-37510/3-A							CI	lient Sar	nple ID:	Lab Control	Sampl	le Dup
Matrix: Solid										Prep T	ype: S	oluble
Analysis Batch: 37597												
			Spike		LCSD	LCSD				%Rec		RPD
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250		255.9		mg/Kg		102	90 - 110	1	20

Client: Ensolum

Project/Site: PLU 21 BD 125H

Job ID: 890-3245-1 SDG: 03E1558068

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 890-3245-1 MS Matrix: Solid Analysis Batch: 37597									Client Sar Prep	nple ID: Type: S	
Analyte	•	Sample Qualifier	Spike Added 251		MS Qualifier	Unit mg/Kg	D	%Rec	%Rec Limits 90 - 110		
Lab Sample ID: 890-3245-1 MSD Matrix: Solid Analysis Batch: 37597									Client Sar Prep	nple ID: Type: S	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	141		251	405.1		mg/Kg		106	90 - 110	0	20

Client: Ensolum Project/Site: PLU 21 BD 125H

5

Job ID: 890-3245-1 SDG: 03E1558068

GC VOA

Analysis Batch: 37616

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-1	PH02	Total/NA	Solid	8021B	37622
890-3245-2	PH02A	Total/NA	Solid	8021B	37622
890-3245-3	PH03	Total/NA	Solid	8021B	37622
890-3245-4	PH03A	Total/NA	Solid	8021B	37622
890-3245-5	PH04	Total/NA	Solid	8021B	37622
MB 880-37622/5-A	Method Blank	Total/NA	Solid	8021B	37622
LCS 880-37622/1-A	Lab Control Sample	Total/NA	Solid	8021B	37622
LCSD 880-37622/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37622
890-3211-A-3-E MS	Matrix Spike	Total/NA	Solid	8021B	37622
890-3211-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37622

Prep Batch: 37622

LC3 000-37022/1-A	Lab Control Sample	TOtal/INA	Soliu	00210	37022
LCSD 880-37622/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37622 8
890-3211-A-3-E MS	Matrix Spike	Total/NA	Solid	8021B	37622
890-3211-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	37622 9
Prep Batch: 37622					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-1	PH02	Total/NA	Solid	5035	4 /
890-3245-2	PH02A	Total/NA	Solid	5035	
890-3245-3	PH03	Total/NA	Solid	5035	
890-3245-4	PH03A	Total/NA	Solid	5035	
890-3245-5	PH04	Total/NA	Solid	5035	
MB 880-37622/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37622/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37622/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3211-A-3-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3211-A-3-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 37670

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3245-6	PH04A	Total/NA	Solid	5035	
MB 880-37670/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-37670/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-37670/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3245-6 MS	PH04A	Total/NA	Solid	5035	
890-3245-6 MSD	PH04A	Total/NA	Solid	5035	

Analysis Batch: 37727

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3245-1	PH02	Total/NA	Solid	Total BTEX	
890-3245-2	PH02A	Total/NA	Solid	Total BTEX	
890-3245-3	PH03	Total/NA	Solid	Total BTEX	
890-3245-4	PH03A	Total/NA	Solid	Total BTEX	
890-3245-5	PH04	Total/NA	Solid	Total BTEX	
890-3245-6	PH04A	Total/NA	Solid	Total BTEX	

Analysis Batch: 37766

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-6	PH04A	Total/NA	Solid	8021B	37670
MB 880-37670/5-A	Method Blank	Total/NA	Solid	8021B	37670
LCS 880-37670/1-A	Lab Control Sample	Total/NA	Solid	8021B	37670
LCSD 880-37670/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	37670
890-3245-6 MS	PH04A	Total/NA	Solid	8021B	37670
890-3245-6 MSD	PH04A	Total/NA	Solid	8021B	37670

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3245-1

SDG: 03E1558068

GC Semi VOA

Analysis Batch: 37440

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-1	PH02	Total/NA	Solid	8015B NM	37501
890-3245-2	PH02A	Total/NA	Solid	8015B NM	37501
890-3245-3	PH03	Total/NA	Solid	8015B NM	37501
890-3245-4	PH03A	Total/NA	Solid	8015B NM	37501
890-3245-5	PH04	Total/NA	Solid	8015B NM	37501
890-3245-6	PH04A	Total/NA	Solid	8015B NM	37501
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015B NM	37501
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	37501
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	37501
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	37501
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	37501

Prep Batch: 37501

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-3245-1	PH02	Total/NA	Solid	8015NM Prep		
890-3245-2	PH02A	Total/NA	Solid	8015NM Prep		
890-3245-3	PH03	Total/NA	Solid	8015NM Prep		
890-3245-4	PH03A	Total/NA	Solid	8015NM Prep		
890-3245-5	PH04	Total/NA	Solid	8015NM Prep		
890-3245-6	PH04A	Total/NA	Solid	8015NM Prep		
MB 880-37501/1-A	Method Blank	Total/NA	Solid	8015NM Prep		
LCS 880-37501/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep		
LCSD 880-37501/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep		
890-3237-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep		
890-3237-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep		

Analysis Batch: 37666

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-1	PH02	Total/NA	Solid	8015 NM	
890-3245-2	PH02A	Total/NA	Solid	8015 NM	
890-3245-3	PH03	Total/NA	Solid	8015 NM	
890-3245-4	PH03A	Total/NA	Solid	8015 NM	
890-3245-5	PH04	Total/NA	Solid	8015 NM	
890-3245-6	PH04A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 37510

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3245-1	PH02	Soluble	Solid	DI Leach	
890-3245-2	PH02A	Soluble	Solid	DI Leach	
890-3245-3	PH03	Soluble	Solid	DI Leach	
890-3245-4	PH03A	Soluble	Solid	DI Leach	
890-3245-5	PH04	Soluble	Solid	DI Leach	
890-3245-6	PH04A	Soluble	Solid	DI Leach	
MB 880-37510/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3245-1 MS	PH02	Soluble	Solid	DI Leach	
890-3245-1 MSD	PH02	Soluble	Solid	DI Leach	

Eurofins Carlsbad

Page 87 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3245-1 SDG: 03E1558068

HPLC/IC

Analysis Batch: 37597

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3245-1	PH02	Soluble	Solid	300.0	37510
890-3245-2	PH02A	Soluble	Solid	300.0	37510
890-3245-3	PH03	Soluble	Solid	300.0	37510
890-3245-4	PH03A	Soluble	Solid	300.0	37510
890-3245-5	PH04	Soluble	Solid	300.0	37510
890-3245-6	PH04A	Soluble	Solid	300.0	37510
MB 880-37510/1-A	Method Blank	Soluble	Solid	300.0	37510
LCS 880-37510/2-A	Lab Control Sample	Soluble	Solid	300.0	37510
LCSD 880-37510/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	37510
890-3245-1 MS	PH02	Soluble	Solid	300.0	37510
890-3245-1 MSD	PH02	Soluble	Solid	300.0	37510

5 6 7

Job ID: 890-3245-1 SDG: 03E1558068

Lab Sample ID: 890-3245-1

Lab Sample ID: 890-3245-2

Lab Sample ID: 890-3245-3

Lab Sample ID: 890-3245-4

Matrix: Solid

Matrix: Solid

Date Collected: 10/18/22 10:35 Date Received: 10/20/22 09:38

Project/Site: PLU 21 BD 125H

Client Sample ID: PH02

Client: Ensolum

	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	37622	10/24/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 11:40	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/24/22 16:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/21/22 23:31	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:14	СН	EET MID

Client Sample ID: PH02A

Date Collected: 10/18/22 10:40

Date Received: 10/20/22 09:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	37622	10/24/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 12:00	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/24/22 16:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/21/22 23:52	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:28	СН	EET MID

Client Sample ID: PH03

Date Collected: 10/18/22 10:50

Date Received: 10/20/22 09:38

	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	37622	10/24/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 12:21	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/24/22 16:42	SM	EET MID
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 00:14	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:33	СН	EET MID

Client Sample ID: PH03A Date Collected: 10/18/22 10:55 Date Received: 10/20/22 09:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	37622	10/24/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 12:41	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/24/22 16:42	SM	EET MID

Eurofins Carlsbad

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Matrix: Solid

Released to Imaging: 2/22/2023 2:12:01 PM

Matrix: Solid

Job ID: 890-3245-1 SDG: 03E1558068

Lab Sample ID: 890-3245-4 Matrix: Solid

Lab Sample ID: 890-3245-5

Date Collected: 10/18/22 10:55 Date Received: 10/20/22 09:38

Client Sample ID: PH03A

Project/Site: PLU 21 BD 125H

Client: Ensolum

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 00:35	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:48	СН	EET MID

Client Sample ID: PH04 Date Collected: 10/18/22 11:00

Date Received: 10/20/22 09:38

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Ргер Туре	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	37622	10/24/22 09:35	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37616	10/24/22 15:46	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/25/22 12:00	SM	EET MID
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 00:57	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:52	СН	EET MID

Client Sample ID: PH04A

Date Collected: 10/18/22 11:05 Date Received: 10/20/22 09:38 Lab Sample ID: 890-3245-6

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	Prep	5035			4.96 g	5 mL	37670	10/24/22 12:42	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	37766	10/25/22 13:09	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			37727	10/25/22 16:54	SM	EET MID
Total/NA	Analysis	8015 NM		1			37666	10/24/22 12:22	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	37501	10/21/22 13:46	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	37440	10/22/22 01:18	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	37510	10/21/22 14:10	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	37597	10/23/22 18:57	CH	EET MID

Laboratory References:

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

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5

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Laboratory: Eurofins Midland

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

hority	ity Program		Identification Number	Expiration Date
as	1	NELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report	out the laboratory is not certif	ied by the governing authority. This list ma	av include analytes for
the agency does not o	fer certification.			
• •		Matrix	Analyte	
the agency does not o	fer certification.			

Page 91 of 192

Job ID: 890-3245-1 SDG: 03E1558068

10

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3245-1 SDG: 03E1558068

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
SW846 =	= "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, Ma "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third E = TestAmerica Laboratories, Standard Operating Procedure	•	
Laboratory R			
EET MID	= Eurofins Midland, 1211 W. Florida Ave, Midland, TX 79701, TEL (432)704-5440		

Protocol References:

Laboratory References:

Sample Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth	
890-3245-1	PH02	Solid	10/18/22 10:35	10/20/22 09:38	1'	
890-3245-2	PH02A	Solid	10/18/22 10:40	10/20/22 09:38	2'	
890-3245-3	PH03	Solid	10/18/22 10:50	10/20/22 09:38	1'	5
890-3245-4	PH03A	Solid	10/18/22 10:55	10/20/22 09:38	2'	J
890-3245-5	PH04	Solid	10/18/22 11:00	10/20/22 09:38	1'	
890-3245-6	PH04A	Solid	10/18/22 11:05	10/20/22 09:38	2'	0
						8
						9
						12
						13
						1

						Hobbs, N	M (575)	392-7550), Carlsbac	EL Paso, TX (915) 565-3443, Lubbock, 1X (806) /94-1295 Hobbs, NM (575) 392-7550, Carisbad, NM (575) 988-3199	8-3199			
									5			www.	www.xenco.com Page	. 01
	Kalel Jennings					(if different)	Ca	Garren Green	len					
Company Name: El Address: 37	3122 National Parks Hwv	Parks H	M		Company Name Address:	Name.	310	3104 E. Gree	ergy Green St.		Sta	State of Project:		
e ZIP:	Carlsbad, NM 88220	8220			City, State ZIP:	ZIP:	Cal	Isbad, N	Carlsbad, NM 88220		Rei	Reporting: Level II 🗌 Level III 🔲 PST/UST [\square	
	303 887 2046			Email:	Email: Garreft G	reen@E	No.	lob I co	E		Dei	Deliverables: EDD	ADaPT	Other:
Project Name:	PLU 21	PLU 21 BD 125H	5H	Turn	Turn Around	-	-			A	ANALYSIS REQUEST	ST	Pres	Preservative Codes
Project Number:	03E	03E1558068		K Routine	Rush	āŏ	Pres. Code						None: NO	DI Water: H ₂ O
Project Location:				Due Date:									Cool: Cool	
Sampler's Name: PO #:	Conno	Connor Whitman		TAT starts the day received by the lab, if received by 4:30pm	e day receivi eived by 4:3		5					_	HCL: HC H ₂ SO ₄ : H ₂	NaOH: Na NaOH: Na
SAMPLE RECEIPT	Temp Blank:	ank:	Yes No	Wet Ice:	Yes No	-	1939((H ₃ PO4 HP	0
Samples Received Intact:			Thermometer ID:		204	2							NaHSO4: NABIS	NABIS
Cooler Custody Seals:	Yes No	AIN	N/A Correction Factor:			n	-			S-068	110-3745 Chain of Control 1		Na ₂ S ₂ O ₃ : NaSO ₃ 7n Acatata+NaO	Na ₂ S ₂ O ₃ : NaSO ₃ 7n Acetate+NaOH· 7n
Sample Custody Seals: Total Containers:	Yes No	AN I	Temperature Keading: Corrected Temperature:	eading:	NN.	a	U SB		12			ay	NaOH+As	NaOH+Ascorbic Acid: SAPC
Sample Identification		Matrix	Date	Time	Depth	Grabi #	HLORID Con of C #	108) Hd.	08) XƏT				San	Sample Comments
PH02		S	10/18/2022	10:35	=		1	+-	×				Incident ID	: Di
PH02A		S	10/18/2022	10:40	2'	U	- ×	×	×				NAPP22	NAPP2214547737
PH03		S	10/18/2022	10:50	1.	G	+ ×	×	×				Cost Center	tter:
PH03A		s	10/18/2022	10:55	2'	U	×	×	×					1666421001
PH04		S	10/18/2022	11:00	+	U	+ ×	×	×				AFE:	
PH04A		S	10/18/2022	11:05	2'	G		×	×				_	
						-	-							
			V	- IT		+	+							
						\mathbb{A}		_						
						-	_	Ц	1				_	
Total 200.7 / 6010	0 200.8 / 6020:	020:	8RC	BRCRA 13PPM	M Texas 11		Sb A	Al Sb As Ba Be	m	Cd Ca Cr C	Co Cu Fe Pb Mg Mn Mo Ni K	Se	la Sr TI	Sn U V Zn
Circle Method(s) and Metal(s) to be analyzed	Metal(s) to b∈	s analyz	red	TCLP / SPLP 6010:	LP 6010:	BRCRA	A Sb	As	Ba Be Cd	о С	Cu Pb Mn Mo Ni S	Se Ag Ti U	Hg: 1631/245.1/7	7470 /7471
gnature of this doc . Eurofins Xenco v is Xenco. A minimu	ument and relinqu ill be liable only fo m charge of \$85.0	ishment of or the cost of will be a	of samples constitution of samples and shipplied to each proj	ites a valid purc hall not assume ject and a chan	chase order f any respons ge of \$5 for e	rom client ibility for	compan any loss	/ to Eurofi is or expe tted to Eur	ins Xenco, nses incuri rofins Xenc	ts affiliates an ed by the clier o, but not anal	a subcontractors. It assig t if such losses are due tr yzed. These terms will be	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 \$5.00 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 of Eurofins Xenco. A minimum charge of \$5.00 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	onditions he control ly negotiated.	
Relinquished by: (Signature)	Signature)		Received	Received by: (Signature)	ure)		Da	Date/Time		Relinquist	Relinquished by: (Signature)	Received t	Received by: (Signature)	Date/Time
when		R	wala	X.L.	A		0/301	ec/a	9352					



Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3245 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Job Number: 890-3245-1 SDG Number: 03E1558068

14

Job Number: 890-3245-1 SDG Number: 03E1558068

List Source: Eurofins Midland

List Creation: 10/21/22 10:46 AM

Login Sample Receipt Checklist

Client: Ensolum

Login Number: 3245 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	

Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").

Received by OCD: 11/30/2022 7:27:20 AM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/21/2022 2:58:31 PM Revision 1

JOB DESCRIPTION

PLU 21 BD 125H SDG NUMBER 03E1558068

JOB NUMBER

890-3402-1

Page 97 of 192

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



SDG: 03E1558068

Laboratory Job ID: 890-3402-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18
Appendix	20



MQL NC

ND

NEG

POS

PQL

QC

RL

RPD TEF

TEQ

TNTC

RER

PRES

cerveu by OCL): 11/30/2022 7:27:20 AM	Page 99 of	174
	Definitions/Glossary		
Client: Ensolu Project/Site: F	im PLU 21 BD 125H	Job ID: 890-3402-1 SDG: 03E1558068	5
Qualifiers			
			3
GC VOA			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VO			5
Qualifier	Qualifier Description		
*1	LCS/LCSD RPD exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
Glossary			
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	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)		1
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		

Eurofins Carlsbad

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

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

Reporting Limit or Requested Limit (Radiochemistry)

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

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Job ID: 890-3402-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3402-1

REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS06 (890-3402-1).

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: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS06 Date Collected: 11/07/22 12:05

Date Received: 11/07/22 14:17 Sample Depth: 0.2'

Analyte

Method: SW846 8021B - \	Volatile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00198	U	0.00198	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
Toluene	<0.00198	U	0.00198	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
m-Xylene & p-Xylene	< 0.00396	U	0.00396	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		11/09/22 13:56	11/10/22 13:00	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		70 - 130			11/09/22 13:56	11/10/22 13:00	1
1,4-Difluorobenzene (Surr)	107		70 - 130			11/09/22 13:56	11/10/22 13:00	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396	mg/Kg			11/10/22 13:49	1

Analyte	Result (Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	69.5		50.0	mg/Kg			11/11/22 14:06	1	
Method: SW846 8015B NM	- Diesel Range	Organics (DF	RO) (GC)						

RL

Result Qualifier

Gasoline Range Organics55.1*150.0(GRO)-C6-C10 </th <th>mg/Kg mg/Kg</th> <th>- 11/10/22 08:48 11/10/22 08:48</th> <th>11/11/22 11:58</th> <th>1 1</th>	mg/Kg mg/Kg	- 11/10/22 08:48 11/10/22 08:48	11/11/22 11:58	1 1
	mg/Kg	11/10/22 08:48	11/11/22 11:58	1
				•
Oll Range Organics (Over14.450.0C28-C36)	mg/Kg	11/10/22 08:48	11/11/22 11:58	1
Surrogate %Recovery Qualifier Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane 109 70 - 130		11/10/22 08:48	11/11/22 11:58	1
o-Terphenyl 118 70 - 130		11/10/22 08:48	11/11/22 11:58	1
Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble	•			
Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL	Unit	D Prepared	Analyzed	Dil Fac

Unit

D

Prepared

Analyzed

Page 101 of 192

Matrix: Solid

Job ID: 890-3402-1 SDG: 03E1558068

Lab Sample ID: 890-3402-1

5

13 14

Dil Fac

Surrogate Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC) **Matrix: Solid**

			Pe
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3374-A-1-C MS	Matrix Spike	117	94
890-3374-A-1-D MSD	Matrix Spike Duplicate	115	100
890-3402-1	SS06	109	107
LCS 880-39013/1-A	Lab Control Sample	119	99
LCSD 880-39013/2-A	Lab Control Sample Dup	112	96
MB 880-39013/5-A	Method Blank	87	96
MB 880-39079/5-A	Method Blank	83	100
Surrogate Legend			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

Prep Type: Total/NA

			Percent Surrogate Recovery (Acceptance Limits)						
		1CO1	OTPH1						
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		13				
890-3402-1	SS06	70	118						
890-3402-1 MS	SS06	86	79						
890-3402-1 MSD	SS06	82	73						
LCS 880-39172/2-A	Lab Control Sample	94	97						
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109						
MB 880-39172/1-A	Method Blank	119	134 S1+						

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Page 102 of 192

5 6 7

Job ID: 890-3402-1 SDG: 03E1558068

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39013/5-A Matrix: Solid

Analysis Batch: 39086

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/08/22 13:56	11/10/22 03:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/08/22 13:56	11/10/22 03:41	1

Lab Sample ID: LCS 880-39013/1-A Matrix: Solid Analysis Batch: 39086

Analysis Batch: 39086							Prep Batch: 39013
	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.09861		mg/Kg		99	70 - 130
Toluene	0.100	0.1075		mg/Kg		107	70 - 130
Ethylbenzene	0.100	0.1070		mg/Kg		107	70 - 130
m-Xylene & p-Xylene	0.200	0.1883		mg/Kg		94	70 - 130
o-Xylene	0.100	0.09621		mg/Kg		96	70 - 130

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-39013/2-A Matrix: Solid

Analysis Batch: 39086

Analysis Batch: 39086							atch:	h: 39013	
-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09159		mg/Kg		92	70 - 130	7	35
Toluene	0.100	0.1006		mg/Kg		101	70 - 130	7	35
Ethylbenzene	0.100	0.09712		mg/Kg		97	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1715		mg/Kg		86	70 - 130	9	35
o-Xylene	0.100	0.08615		mg/Kg		86	70 - 130	11	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-3374-A-1-C MS Matrix: Solid

Analysis Batch: 39086

Analysis Batch: 39086									Prep B	atch: 39013
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.07004		mg/Kg		70	70 - 130	
Toluene	<0.00200	U	0.0996	0.08341		mg/Kg		84	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

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7

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39013

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Released to Imaging: 2/22/2023 2:12:01 PM

Lab Sample ID: 890-3374-A-1-C MS

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

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

SDG: 03E1558068
nt Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 39086 Prep Batch: 39013 Spike MS MS %Rec Sample Sample Analyte **Result Qualifier** Added **Result Qualifier** Unit D %Rec Limits Ethylbenzene <0.00200 U 0.0996 0.08100 mg/Kg 81 70 - 130 m-Xylene & p-Xylene <0.00401 U 0.199 0.1464 mg/Kg 73 70 - 130 o-Xylene <0.00200 U 0.0996 0.07491 mg/Kg 75 70 - 130 MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-3374-A-1-D MSD Matrix: Solid Analysis Batch: 39086

Analysis Batch: 39086									Prep B	atch: 3	39013
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0994	0.09453		mg/Kg		95	70 - 130	30	35
Toluene	<0.00200	U	0.0994	0.1030		mg/Kg		104	70 - 130	21	35
Ethylbenzene	<0.00200	U	0.0994	0.09726		mg/Kg		98	70 - 130	18	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1707		mg/Kg		86	70 - 130	15	35
o-Xylene	<0.00200	U	0.0994	0.08657		mg/Kg		87	70 - 130	14	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-39079/5-A Matrix: Solid Analysis Batch: 39086

Client Sample ID: Ma	trix Spike Duplicate
	Prep Type: Total/NA
	Pron Batch: 39013

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Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39079

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130			11/09/22 09:54	11/09/22 15:45	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/09/22 09:54	11/09/22 15:45	1

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

Lab Sample ID: MB 880-39172/1 Matrix: Solid Analysis Batch: 39269	I-A						le ID: Method Prep Type: To Prep Batch:	otal/NA
	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		11/10/22 08:48	11/11/22 09:30	1

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

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

Lab Sample ID: MB 880-39	172/1-A								Clie	ent Samp			
Matrix: Solid											Prep Typ		
Analysis Batch: 39269											Prep B	atch:	39172
		MB	MB										
Analyte	Re	sult	Qualifier	RL		Ur	it	D	P	repared	Analyz	ed	Dil Fac
Diesel Range Organics (Over C10-C28)	<	50.0	U	50.0		mį	J/Kg		11/1	10/22 08:48	11/11/22 (09:30	1
Oll Range Organics (Over C28-C36) <5	50.0	U	50.0		mę	J/Kg		11/1	10/22 08:48	11/11/22 (09:30	1
		MВ	MB										
Surrogate	%Recov	/ery	Qualifier	Limits					F	Prepared	Analyz	ed	Dil Fac
1-Chlorooctane		119		70 - 130					11/1	10/22 08:48	11/11/22	09:30	1
o-Terphenyl		134	S1+	70 - 130					11/1	10/22 08:48	11/11/22 (09:30	1
Lab Sample ID: LCS 880-39	9172/2-A						CI	ien	t Sa	mple ID:	Lab Con	trol S	ample
Matrix: Solid											Prep Ty	oe: To	tal/NA
Analysis Batch: 39269											Prep B	atch:	39172
				Spike	LCS	LCS					%Rec		
Analyte				Added	Result	Qualifie	er Unit		D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10				1000	815.5		mg/Kg			82	70 - 130		
Diesel Range Organics (Over C10-C28)				1000	846.7		mg/Kg			85	70 - 130		
010-020)	LCS	LCS	:										
Surrogate	%Recovery			Limits									
1-Chlorooctane	94			70 - 130									
o-Terphenyl	97			70 - 130									
Lab Sample ID: LCSD 880- Matrix: Solid Analysis Batch: 39269	39172/3-A						Client	San	nple	ID: Lab	Control S Prep Tyj Prep B	be: To	tal/NA
-				Spike	LCSD	LCSD					%Rec		RPD
Analyte				Added	Result	Qualifie	er Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10				1000	1003	*1	mg/Kg	I		100	70 - 130	21	20
Diesel Range Organics (Over C10-C28)				1000	950.2		mg/Kg			95	70 - 130	12	20
010 020	LCSD	LCS	D										
Surrogate	%Recovery	Qua	lifier	Limits									
1-Chlorooctane	107			70 - 130									
o-Terphenyl	109			70 - 130									
Lab Sample ID: 890-3402-1 Matrix: Solid	MS									Cli	ent Samı Prep Tyı	be: To	tal/NA
Analysis Batch: 39269	Sample	Sam	nple	Spike	MS	MS					Prep B %Rec	atch:	39172
Analyte	Result		-	Added		Qualifie	er Unit		D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10	55.1			997	1007		mg/Kg			95	70 - 130		
Diesel Range Organics (Over C10-C28)	<50.0	U		997	861.7		mg/Kg			84	70 - 130		
	MS	ме											
Surrogata			lifior	Limite									
Surrogate	%Recovery	Qua	inner	Limits									
1-Chlorooctane	86			70 - 130									

Job ID: 890-3402-1

SDG: 03E1558068

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79

o-Terphenyl

70 - 130

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3402-1 SDG: 03E1558068

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

Matrix: Solid									Prep Ty	pe: Tot	al/NA
Analysis Batch: 39269									Prep B	atch: 3	39172
	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	55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	20
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	82		70 - 130								
o-Terphenyl	73		70 - 130								

Lab Sample ID: MB 880-39 Matrix: Solid Analysis Batch: 39335	126/1-A							Cl	ient Sarr	ple ID: M Prep T		
	M	B MB										
Analyte	Resu	It Qualifier		RL		Unit		D	Prepared	Analyz	zed	Dil Fac
Chloride	<5.0	0 U		5.00		mg/K	ζg			11/12/22	02:56	1
Lab Sample ID: LCS 880-39	9126/2-A						Cli	ent Sa	ample ID	: Lab Cor	ntrol Sa	ample
Matrix: Solid										Prep Ty	ype: So	oluble
Analysis Batch: 39335												
			Spike			LCS				%Rec		
Analyte			Added			Qualifier	Unit	D		Limits		
Chloride			250		266.1		mg/Kg		106	90 - 110		
Lab Sample ID: LCSD 880- Matrix: Solid Analysis Batch: 39335	39126/3-A					(Client S	ample	e ID: Lat	Control Prep Ty		
			Spike		LCSD	LCSD				%Rec		RPD
Analyte			Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride			250		258.9		mg/Kg		104	90 - 110	3	20
Lab Sample ID: 890-3402-1 Matrix: Solid	MS								C	lient Sam Prep Ty	-	
Analysis Batch: 39335												
-	Sample Sa	ample	Spike		MS	MS				%Rec		
Analyte	Result Q	ualifier	Added		Result	Qualifier	Unit	D	%Rec	Limits		
Chloride	195		249		466.5		mg/Kg		109	90 - 110		
Lab Sample ID: 890-3402-1	MSD								С	lient Sam	ple ID:	SS06
Matrix: Solid										Prep T	•	
Analysis Batch: 39335												
	Sample Sa	ample	Spike		MSD	MSD				%Rec		RPD
Analyte	Result Q	ualifier	Added		Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	195		249		456.2		mg/Kg		105	90 - 110	2	20

Page 106 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H

GC VOA

Prep Batch: 39013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3402-1	SS06	Total/NA	Solid	5035	
MB 880-39013/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39013/1-A	Lab Control Sample	Total/NA	Solid	5035	
_CSD 880-39013/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
390-3374-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3374-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39079/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 39086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3402-1	SS06	Total/NA	Solid	8021B	39013
MB 880-39013/5-A	Method Blank	Total/NA	Solid	8021B	39013
MB 880-39079/5-A	Method Blank	Total/NA	Solid	8021B	39079
LCS 880-39013/1-A	Lab Control Sample	Total/NA	Solid	8021B	39013
LCSD 880-39013/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39013
890-3374-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	39013
890-3374-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39013
Analysis Ratch: 202/	40				

Analysis Batch: 39248

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3402-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39172

Lab Sample ID 890-3402-1	Client Sample ID	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-1 MS	SS06	Total/NA	Solid	8015NM Prep	
890-3402-1 MSD	SS06	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3402-1	SS06	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-1 MS	SS06	Total/NA	Solid	8015B NM	39172
890-3402-1 MSD	SS06	Total/NA	Solid	8015B NM	39172

Analysis Batch: 39337

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3402-1	SS06	Total/NA	Solid	8015 NM	

Page 107 of 192

8 9

Job ID: 890-3402-1

SDG: 03E1558068

Client: Ensolum Project/Site: PLU 21 BD 125H

HPLC/IC

Leach Batch: 39126

Leach Batch: 39126						
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch	
890-3402-1	SS06	Soluble	Solid	DI Leach		
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach		
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach		
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach		
390-3402-1 MS	SS06	Soluble	Solid	DI Leach		
890-3402-1 MSD	SS06	Soluble	Solid	DI Leach		

Analysis Batch: 39335

Analysis Batch: 3933	35					8
Lab Sample ID 890-3402-1	Client Sample ID SS06	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 39126	9
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126	
890-3402-1 MS	SS06	Soluble	Solid	300.0	39126	
890-3402-1 MSD	SS06	Soluble	Solid	300.0	39126	

11/21/2022 (Rev. 1)

Job ID: 890-3402-1 SDG: 03E1558068
Initial

Amount

5.05 g

5 mL

10.01 g

1 uL

5.03 g

0 mL

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

1.0 mL

Batch

39013

39086

39248

39337

39172

39269

39126

39335

Number

Dil

1

1

1

1

1

Factor

Run

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS06 Date Collected: 11/07/22 12:05 Date Received: 11/07/22 14:17

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

Batch

5035

8021B

Total BTEX

8015NM Prep

8015 NM

8015B NM

DI Leach

300.0

Method

Job ID: 890-3402-1 SDG: 03E1558068

Lab

EET MID

Lab Sample ID: 890-3402-1 Matrix: Solid

Analyst

MNR

MNR

Prepared

or Analyzed

11/09/22 13:56

11/10/22 13:00

11/10/22 13:49 SM

11/11/22 14:06 SM

11/10/22 08:48 DM

11/11/22 11:58 SM

11/09/22 15:04 KS

11/12/22 03:11 CH

Laboratory References:

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

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

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3402-1 SDG: 03E1558068

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 analyte:	s are included in this rend	ort but the laboratory is r	not certified by the governing authority.	This list may include analytes for whic
the agency does not o	•		lot contined by the governing dutionty.	
• •	•	Matrix	Analyte	
the agency does not o	offer certification.			

Eurofins Carlsbad

Page 110 of 192

10

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3402-1 SDG: 03E1558068

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
3015B 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
3015NM Prep	Microextraction	SW846	EET MID
OI 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

Page 112 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H

Job ID: 890-3402-1
SDG: 03E1558068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3402-1	SS06	Solid	11/07/22 12:05	11/07/22 14:17	0.2'

	Į	D	
		3	
		9	
1		2	
		2	
-			

Kalei Jennings Ensolum, LLC 601 N. Marienfeld Street, Suite 400 Midland, TX 79701 817-683-2503 PLU 21 BD 125H 03E1558068 32.10974, -103.88422 Julianna Falcomata Julianna Falcomata Intact: Yes< No Ves< No Matrix Seals: Yes< Matrix Date	Bill to: (if dif Company M Address: City, State aceived by 4:30 S	EL Paso, TX (915) 585-343, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199 ZIP: 3104 E. Greene Street ZIP: Carlsbad, NM (875) 988-3199 Code 3104 E. Greene Street ZIP: Carlsbad, NM (875) 988-3199 Code Anal, Code Anal, Parameters Anal, Code Anal, Code Anal, Vital Parameters Anal, Anal, Vital Parameters Anal, Anal, Vital X X X Anal, Anal,	(915) 585-3443, Lubbock, T Garret Green XTO Energy, Inc. Carlsbad, NM 88220 Com, bbeliil@ensolun X TPH X CHLORIDES	ANAL 988-319	6 6 7 8 9 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	www.xenco.com Page Work Order Comments Presenvicular I Level III PST/UST TRRP ADaPT Other ADaPT Other Other ADaPT Cool: Cool Cool: Cool HCL: HC H2 HCL: HC H2 HSQ: NABIS NaOH+Ascorbic NaOH+Ascorbic Sample NAOH+Ascorbic NAPP2	Page of Comments Imperfund rifields IRC Imperfund /UST TRRP Level IV Imperfund /UST Other: Imperfund Imperfund Imperfund /UST Other: Imperfund Imperfund Imperfund Imperfund /UST TRRP Level IV Imperfund
Manager: Kalei Jennings ny Name: Ensolum, LLC s: 601 N. Marienfeld Street, Suite 400 s: 601 N. Marienfeld Street, Suite 400 ate ZIP: Midland, TX 79701 ate ZIP: Midland, TX 79701 Name: PLU 21 BD 125H Number: 03E1558068 Number: Julianna Falcomata Location: Julianna Falcomata s: Received Intact: Yes <no< td=""> s: Received Intact: Yes<no< td=""> Custody Seals: Yes<no< td=""> Ottatiners: Yes<no< td=""> Custody Seals: Yes<no< td=""> Sample Identification Matrix Sample Identification Matrix</no<></no<></no<></no<></no<>	Bill to: (if different) Company Name: Address: City, State ZIP: Kiennings@ens I: Kiennings@ens received by 4:30pm eceived by 4:30pm ceived by 4:30pm CVVVVSQ- - 2 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3 - 3	H C # H O # Parameters Carlsbad Carlsbad Carlsbad X BTEX	X TPH X CHLORIDES X CHLORIDES	ANAL	Neporting Level II Level Deliverables: EDD UEST	ork Order Commen P Brownfields ADaPT T ADaPT Cool: Cool HCL: HC H2SQ; H2 HCL: HC Zn Acetate NaOH+Ass Sa Sa Sa	Level IV
ny Name: Ensolum, LLC s: 601 N. Marienfeld Street, Suite 400 ate ZIP: Midland, TX 79701 ate ZIP: 817-683-2503 logar 817-683-2503 Name: PLU 21 BD 125H Number: 03E1558068 Location: 32.10974, -103.88422 Location: Julianna Falcomata Same: Julianna Falcomata Sample Identification Matrix	Company Name: Address: City, State ZIP: City, State ZIP: Rush Rush received by 4:30pm City A:30pm City	Image: Second	X TPH X CHLORIDES	ANAL	Program: UST/PSTPR State of Project: NM Reporting: Level II Level Deliverables: EDD Deliverables: EDD Deliverables: EDD Tain of Custody	P Brownfields Г ADaPT Г Л ADaPT Соо!: Соо! Соо!: Соо! Чэроц: Нс: НС Нс: НС Нс: НС Чэроц: На Чэроц: На За Ха Асеtate NaoH+Ass Sa Каонн-Ass Sa Sa	Level IV Level IV DI Water: H2O MeOH: Me HNO3: HN NaOH: Na Acid: SAPC
s: 601 N. Marienfeld Street, Suite 400 ate ZIP: Midland, TX 79701 817-683-2503 Number: PLU 21 BD 125H Number: 03E1558068 Location: 32.10974, -103.88422 Location: Julianna Falcomata r's Name: Julianna Falcomata s Received Intact: Les No Custody Seals: Yes No N/A Correction Fa Custody Seals: Yes No N/A Correction Fa	Address: City, State ZIP: City, State ZIP: Kiennings@ens rn Around Push he day received by received by 4.30pm (Ves) No Ves) No No No No No Depth Grab/ Comp	H C # O Parameters C # O C artisbad X BTEX BTEX D b D b	X TPH CHLORIDES	ANAL	State of Project: NM Reporting: Level II Deliverables: EDD	ADaPT C Cool: Cool ADaPT C Cool: Cool Cool: Cool HCL: HC HCL: HC Na2S2O3: H Na2S2O3: H Zn Acetate NaOH+Ass Sa	
Interview Midland, TX 79701 Name: PLU 21 BD 125H Number: 03E1558068 Number: 32.10974, -103.88422 Location: Julianna Falcomata PLE RECEIPT Temp Blank: Yes No SReceived Intact: Yes PCustody Seals: Yes Outlianners: Ves Outlianners: Sample Identification	City, State ZIP: Kiennings@ens rn Around □ Rush the day received by received by 4:30pm • & -& -& • & -& -& -& -& • & -& -& -& -& -& • & -& -& -& -& -& -& -& -& -& -& -& -& -	H O # Parameters O # × BTEX A BTEX	X TPH X CHLORIDES	ANAL	Neporting: Level II Level Deliverables: EDD	ADaPT C ADaPT C Pre None: NO Cool: Cool Cool: Cool HCL: HC +2SQ; H2 +3PQ; HP VaHSQ; N Na25;Q; N Zn Acetate NaOH+Ass Sa A	
817-683-2503 Name: PLU 21 BD 125H Number: 03E1558068 Location: 32.10974, -103.88422 Location: Julianna Falcomata Julianna Falcomata Sample Identification Sample Identification	I Kjennings@ens m Around □ Rush ceived by 4:30pm (Ves) No 177/N000 17	Image: Parameters Image: Paramet	× TPH × CHLORIDES	ANAL	Deliverables: EDD		AABIS VABIS VASO3 VASO3
Name: PLU 21 BD 125H Number: 03E1558068 Location: 32.10974, -103.88422 Location: Julianna Falcomata sr's Name: Julianna Falcomata sreceived Intact: Les s Received Intact: Yes Custody Seals: Yes Ves No Custody Seals: Yes Ves No Custody Seals: Yes Ves No Correction Fa containers: Corrected Ter Sample Identification Matrix Sample Identification Matrix	n Around □ Rush he day received by sceived by 4:30pm verived by 4:30pm ↓ . 0 ↓	H O # O o Parameters O To a × BTEX		ANALYSIS REQ 890-3402 C	hain of Custody	Pre None: NO Cool: Cool HCL: HC HCL: HC H2SQ; H2 H3PQ; HP VaHSQ; M VaHSQ; N VaS2Q; N VaCost NaOH+Asc	AND A CONTRACT AND A
03E1558068 32.10974, -103.88422 Julianna Falcomata Julianna Falcomata Yes No Ves No NiA Ves No NiA Ves No NiA Ves No NiA Correction Fa Corrected Ter Corrected Ter Sampled	Push aceived by a soperation (Ves) No (Ves) No (H O # O O Parameters O # O × BTEX		890-3402 C	hain of Custody	None: NO Cool: Cool HCL: HC H3PO, H2 H3PO, H2 VaHSO, N Va2520; h2 Zn Acetate NaOH+Ast Sa	WABIS VIASO3 viasO3
32.10974, -103.88422 L Julianna Falcomata Temp Blank: Yes No Yes No No Yes No NA Yes No NA Yes No NA Correction Fa Corrected Temperature Sampled	L . O Depth Grab	H g * Parameters		890-3402 C	hain of Custody	HCL: HC H2S04: H2 H3PO4: HP VaHS04: N Va2S203: N Zn Acetate NaOH+Ast Sa	naSO3 e+NaOH: Na e+NaOH: Zn corbic Acid: SAPC
Temp Blank: Yes No NiA Correction Fa	he day received by sceived by 4.30pm (Ves) No 17 NOO - & - @ - & - & - & - & - & - & - & - & - & - &	H Q * Parameters × BTEX		890-3402 C	hain of Custody	HCL: HC +2S04: H2 +3P04: H2 VaHS04: N Va2S203: N Zn Acetate NaOH+Ass Sa	HNO3: HN NABIS NASO3 a+NaOH: Zn acritic Acid: SAPC ample Comments
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Temp Blank: Ves No N/A Yes No N/A Yes No N/A A	(Yes) No - & - & - & - - & - & - & - & - - & - & - & - & - & - & - & - & - & - &	H O # No o Parameter × BTEX			hain of Custody	H-PO+ HP VaHSO, N Zn Acetate NaOH+Ast Cost	nABIS NaSO₃ ∍+NaOH: Zn ∞orbic Acid: SAPC ample Comments
Yes No N/A Yes No N/A Yes No N/A	Depth Comp	H g * Parar × BTEX		890-3402 C	hain of Custody	vaHSQ, n Na ₂ S ₂ O ₃ ; N Zn Acetate NaOH+Asq Cost	NABIS NaSO₃ ∍+NaOH: Zn corbic Acid: SAPC ample Comments
ication Matrix	Depth Grab	H O # X BTEX		890-3402 C	hain of Custody	n Acetate Con Acetate NaOH+Asc Cost	a+NaOH: Zn .corbic Acid: SAPC ample Comments
ication Matrix	Depth Grab/ 2 Comp					NaOH+Asc Cost	ample Comments
dentification Matrix	Depth Grab/ Comp C	H O # × BTEX				Cost Sa	ample Comments
5 11-22		ц ×				Cost	
11 1 22						Cost	
						n	Cost Center: 1666421001
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	d purchase order from	n client company to	Eurofins Xenco, it	ts affiliates and subcontractors.	ctors. It assigns standard terms and conditions uses are due to circumstances beyond the control	anditions	
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	charge of \$5 for each	h sample submitted	to Eurofins Xenco	o, but not analyzed. These terms	terms will be enforced unless previously negotiated.	y negotiated.	
Relinqoishad by: (Signature) Received by: (Signature)	nature)	Date/Time	ime F	Relinquished by: (Signature)	Ire) Received by: (Signature)	: (Signature)	Date/Time
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13 14

Job Number: 890-3402-1 SDG Number: 03E1558068

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3402 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

14

Job Number: 890-3402-1 SDG Number: 03E1558068

Login Sample Receipt Checklist

Client: Ensolum

Sample containers have legible labels.

Sample collection date/times are provided.

There is sufficient vol. for all requested analyses, incl. any requested

Containers requiring zero headspace have no headspace or bubble is

Appropriate sample containers are used.

Containers are not broken or leaking.

Sample bottles are completely filled. Sample Preservation Verified.

HTs)

MS/MSDs

<6mm (1/4").

Login Number: 3402			List Source: Eurofins Midland
List Number: 2 Creator: Rodriguez, Leticia			List Creation: 11/09/22 10:47 AM
Question	Answer	Comment	
The cooler's custody seal, if present, is intact.	N/A		
Sample custody seals, if present, are intact.	N/A		
The cooler or samples do not appear to have been compromised or tampered with.	True		
Samples were received on ice.	True		
Cooler Temperature is acceptable.	True		
Cooler Temperature is recorded.	True		
COC is present.	True		
COC is filled out in ink and legible.	True		
COC is filled out with all pertinent information.	True		
Is the Field Sampler's name present on COC?	True		
There are no discrepancies between the containers received and the COC.	True		
Samples are received within Holding Time (excluding tests with immediate	True		

True

True

True

True True

N/A

True

N/A

Eurofins	Carlsbad				
Released to	Imaging:	2/22/2023	2:12:01	PM	

Received by OCD: 11/30/2022 7:27:20 AM

15

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/21/2022 2:58:31 PM Revision 1

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/21/2022 2:59:29 PM Revision 1

JOB DESCRIPTION

PLU 21 BD 125H SDG NUMBER 03E1558068

JOB NUMBER

890-3403-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



SDG: 03E1558068

Laboratory Job ID: 890-3403-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18
Appendix	20

DLC EDL LOD LOQ MCL MDA MDC MDL

ML

MPN

MQL NC

ND

NEG

POS

PQL

QC

RL

RPD TEF

TEQ

TNTC

RER

PRES

	Definitione/Glassany		
	Definitions/Glossary		
Client: Ensolu		Job ID: 890-3403-1	
Project/Site:	PLU 21 BD 125H	SDG: 03E1558068	
Qualifiers			3
GC VOA			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
GC Semi VO	Α		Į
Qualifier	Qualifier Description		
*1	LCS/LCSD RPD exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
Glossary			4
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			
CNF DER	Duplicate Error Ratio (normalized absolute difference)		
CNF DER Dil Fac	Dilution Factor		
CNF DER Dil Fac DL	Dilution Factor Detection Limit (DoD/DOE)		
CNF DER Dil Fac DL DL, RA, RE, IN	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
CNF DER Dil Fac DL DL, RA, RE, IN DLC	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample Decision Level Concentration (Radiochemistry)		
CNF DER Dil Fac DL DL, RA, RE, IN DLC EDL	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample Decision Level Concentration (Radiochemistry) Estimated Detection Limit (Dioxin)		
CNF DER Dil Fac DL DL, RA, RE, IN DLC EDL LOD	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample Decision Level Concentration (Radiochemistry) Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE)		
CNF DER Dil Fac DL DL, RA, RE, IN DLC EDL LOD LOQ	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample Decision Level Concentration (Radiochemistry) Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE) Limit of Quantitation (DoD/DOE)		
CNF DER Dil Fac DL DL, RA, RE, IN DLC EDL LOD	Dilution Factor Detection Limit (DoD/DOE) Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample Decision Level Concentration (Radiochemistry) Estimated Detection Limit (Dioxin) Limit of Detection (DoD/DOE)		

Method Detection Limit

Minimum Level (Dioxin) Most Probable Number

Method Quantitation Limit

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

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

Not Calculated

Negative / Absent

Positive / Present

Presumptive

Quality Control

Job ID: 890-3403-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3403-1

REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS05 (890-3403-1).

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: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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.

Job ID: 890-3403-1 SDG: 03E1558068

Client Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS05 Date Collected: 11/07/22 12:00

Date Received: 11/07/22 14:17 Sample Depth: 0.2'

Method: SW846 8021B - Vo	latile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		11/09/22 13:56	11/10/22 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	105		70 - 130			11/09/22 13:56	11/10/22 13:21	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/09/22 13:56	11/10/22 13:21	1

	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
	Total BTEX	<0.00401	U	0.00401	mg/Kg			11/10/22 14:19	1		
۱	Mathady SW/946 2045 NM Dissal Banga Organics (DBO) (CC)										

Analyte	•	Qualifier	RL (GC)	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.8	U	49.8	mg/Kg			11/14/22 09:30	1	

Method: SW846 8015B NM - D	Diesel Range	• Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U *1	49.8	mg/Kg		11/10/22 08:48	11/11/22 15:07	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		11/10/22 08:48	11/11/22 15:07	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		11/10/22 08:48	11/11/22 15:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	96		70 - 130			11/10/22 08:48	11/11/22 15:07	1
o-Terphenyl	95		70 - 130			11/10/22 08:48	11/11/22 15:07	1
Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatogra	ohy - Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	301		4.96	mg/Kg			11/12/22 03:25	1

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Page 121 of 192

Job ID: 890-3403-1 SDG: 03E1558068

Lab Sample ID: 890-3403-1

Matrix: Solid

5

Surrogate Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC) **Matrix: Solid**

_		Perce	
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3374-A-1-C MS	Matrix Spike	117	94
890-3374-A-1-D MSD	Matrix Spike Duplicate	115	100
890-3403-1	SS05	105	96
LCS 880-39013/1-A	Lab Control Sample	119	99
LCSD 880-39013/2-A	Lab Control Sample Dup	112	96
MB 880-39013/5-A	Method Blank	87	96
MB 880-39079/5-A	Method Blank	83	100
Surrogate Legend			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Prep Type: Total/NA

			Per	cent Surrogate Recovery (Acceptance Limits)	
		1CO1	OTPH1		
Lab Sample ID	Client Sample ID	(70-130)	(70-130)		13
890-3402-A-1-G MS	Matrix Spike	86	79		
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73		
890-3403-1	SS05	96	95		
LCS 880-39172/2-A	Lab Control Sample	94	97		
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109		
MB 880-39172/1-A	Method Blank	119	134 S1+		

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

5 6

Job ID: 890-3403-1

SDG: 03E1558068

Prep Type: Total/NA

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39013/5-A **Matrix: Solid** Analysis Batch: 39086

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/22 13:56	11/10/22 03:41	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	87		70 - 130			11/08/22 13:56	11/10/22 03:41	1
1,4-Difluorobenzene (Surr)	96		70 - 130			11/08/22 13:56	11/10/22 03:41	1

Lab Sample ID: LCS 880-39013/1-A Matrix: Solid Analysis Batch: 39086

Analysis Batch: 39086							Prep E	Batch: 39013
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09861		mg/Kg		99	70 - 130	
Toluene	0.100	0.1075		mg/Kg		107	70 - 130	
Ethylbenzene	0.100	0.1070		mg/Kg		107	70 - 130	
m-Xylene & p-Xylene	0.200	0.1883		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.09621		mg/Kg		96	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	119		70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-39013/2-A Matrix: Solid

Analysis Batch: 39086

Analysis Batch: 39086						Prep Batch: 39013			
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09159		mg/Kg		92	70 - 130	7	35
Toluene	0.100	0.1006		mg/Kg		101	70 - 130	7	35
Ethylbenzene	0.100	0.09712		mg/Kg		97	70 - 130	10	35
m-Xylene & p-Xylene	0.200	0.1715		mg/Kg		86	70 - 130	9	35
o-Xylene	0.100	0.08615		mg/Kg		86	70 - 130	11	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	112		70 - 130
1,4-Difluorobenzene (Surr)	96		70 - 130

Lab Sample ID: 890-3374-A-1-C MS Matrix: Solid

Analysis Batch: 39086

Analysis Batch: 39086									Prep Ba	atch: 39013
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U	0.0996	0.07004		mg/Kg		70	70 - 130	
Toluene	<0.00200	U	0.0996	0.08341		mg/Kg		84	70 - 130	

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Prep Type: Total/NA

Client Sample ID: Matrix Spike

5

7

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39013

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Type: Total/NA

Released to Imaging	: 2/22/2023	2:12:01	PM

Lab Sample ID: 890-3374-A-1-C MS

QC Sample Results

Spike

Added

0.0996

0.199

0.0996

0.08100

0.07491

Client: Ensolum Project/Site: PLU 21 BD 125H

Analysis Batch: 39086

Matrix: Solid

Analyte

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

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

Sample Sample

<0.00200 U

<0.00401 U

<0.00200 U

Result Qualifier

					Job ID: 890-3403-	1
					SDG: 03E155806	8
Conti	nued)					_
			C	liont Sa	mple ID: Matrix Spik	
				ient Sa		
					Prep Type: Total/N	A
					Prep Batch: 3901	3
MS	MS				%Rec	
Result	Qualifier	Unit	D	%Rec	Limits	
0.08100		mg/Kg		81	70 - 130	_
0.1464		mg/Kg		73	70 - 130	
0.07491		mg/Kg		75	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	117		70 - 130
1,4-Difluorobenzene (Surr)	94		70 - 130

Lab Sample ID: 890-3374-A-1-D MSD Matrix: Solid Analysis Batch: 39086

Analysis Batch: 39086	Sample	Sample	Spike	MSD	MSD				Rec Prep ∎	atch: 3	RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U	0.0994	0.09453		mg/Kg		95	70 - 130	30	35
Toluene	<0.00200	U	0.0994	0.1030		mg/Kg		104	70 - 130	21	35
Ethylbenzene	<0.00200	U	0.0994	0.09726		mg/Kg		98	70 - 130	18	35
m-Xylene & p-Xylene	<0.00401	U	0.199	0.1707		mg/Kg		86	70 - 130	15	35
o-Xylene	<0.00200	U	0.0994	0.08657		mg/Kg		87	70 - 130	14	35

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	115		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: MB 880-39079/5-A Matrix: Solid **Analysis Batch: 39086**

Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA Prop Batch: 39013

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39079

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/22 09:54	11/09/22 15:45	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		70 - 130			11/09/22 09:54	11/09/22 15:45	1
1,4-Difluorobenzene (Surr)	100		70 - 130			11/09/22 09:54	11/09/22 15:45	1

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

MB MB

Lab Sample ID: MB 880-39172/1-A Matrix: Solid Analysis Batch: 39269							le ID: Method Prep Type: To Prep Batch	otal/NA
	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		11/10/22 08:48	11/11/22 09:30	1

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

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

Lab Sample ID: MB 880-39	172/1-A								Clie	ent Samp	ole ID: M	ethod	Blank
Matrix: Solid											Prep Ty	pe: To	tal/NA
Analysis Batch: 39269											Prep E	Batch:	39172
		MB ME	3										
Analyte		sult Qu	alifier	RL		Un	it	D	Р	repared	Analy	zed	Dil Fac
Diesel Range Organics (Over C10-C28)	<5	50.0 U		50.0		mg	/Kg	_	11/1	0/22 08:48	11/11/22	09:30	1
Oll Range Organics (Over C28-C36) <5	50.0 U		50.0		mg	ı/Kg		11/1	0/22 08:48	11/11/22	09:30	1
		MB ME											
Surrogate	%Recov		alifier	Limits						repared	Analy		Dil Fac
1-Chlorooctane		119		70 - 130						0/22 08:48			1
o-Terphenyl		134 S1	+	70 - 130					11/1	0/22 08:48	11/11/22	09:30	1
Lab Sample ID: LCS 880-39	172/2-A						Cli	ent	t Sai	mple ID:			
Matrix: Solid											Prep Ty		
Analysis Batch: 39269											Prep E	Batch:	39172
				Spike	LCS	LCS					%Rec		
Analyte				Added	Result	Qualifie	er Unit		D	%Rec	Limits		
Gasoline Range Organics (GRO)-C6-C10				1000	815.5		mg/Kg			82	70 - 130		
Diesel Range Organics (Over C10-C28)				1000	846.7		mg/Kg			85	70 - 130		
,	LCS	LCS											
Surrogate	%Recovery	Qualifie	er	Limits									
1-Chlorooctane	94			70 - 130									
o-Terphenyl	97			70 - 130									
Lab Sample ID: LCSD 880-3	39172/3-A						Client S	Sam	nple	ID: Lab	Control	Samp	le Dup
Matrix: Solid									÷		Prep Ty		
Analysis Batch: 39269													39172
-				Spike	LCSD	LCSD					%Rec		RPD
Analyte				Added	Result	Qualifie	er Unit		D	%Rec	Limits	RPD	Limit
Gasoline Range Organics				1000	1003	*1	mg/Kg			100	70 - 130	21	20
(GRO)-C6-C10													
Diesel Range Organics (Over C10-C28)				1000	950.2		mg/Kg			95	70 - 130	12	20
)	LCSD	LCSD											
Surrogate	%Recovery		er	Limits									
1-Chlorooctane	107			70 - 130									
o-Terphenyl	109			70 - 130									
_ Lab Sample ID: 890-3402-A	-1-G MS								CI	lient San	ple ID:	Matrix	Spike
Matrix: Solid											· Prep Ty		
Analysis Batch: 39269	Commis	Comple		Creika	МС	MC					Prep E		39172
Apolyto	Sample Result	-		Spike Addod		MS Qualific	ا ا ا		-	0/ Dec	%Rec		
Analyte Gasoline Range Organics	55.1		<u>, </u>	Added	1007	Qualifie	er Unit mg/Kg		_ <u>D</u>	95	Limits 70 - 130		
(GRO)-C6-C10 Diesel Range Organics (Over	<50.0	U		997	861.7		mg/Kg			84	70 - 130		
C10-C28)													
	MS												
Surrogate		Qualifie	er	Limits									
1-Chlorooctane	86			70 - 130									

Job ID: 890-3403-1

SDG: 03E1558068

79

o-Terphenyl

70 - 130

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3403-1 SDG: 03E1558068

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

Matrix: Solid Analysis Batch: 39269	-A-1-H MSD					Client S	amp	le ID: N	latrix Spil Prep Ty Prep E		al/NA
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	•	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	20
	MSD										
Surrogate	%Recovery	Qualifier	Limits								
1-Chlorooctane	82		70 - 130								
o-Terphenyl	73		70 - 130								
lethod: 300.0 - Anion	s, Ion Chro	omatogra	ohy								
Lab Sample ID: MB 880-3 Matrix: Solid	9126/1-A						Clie	ent Sam	ple ID: M Prep T		
Analysis Batch: 39335		MB MB									
Analyte	Po	sult Qualifier		RL	Unit	D	D	repared	Analy	zod	Dil Fac
Chloride				5.00	mg/K		- F	repareu			
Analysis Batch: 39335											
			Spike Added	-	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Analyte			•	-		Unit mg/Kg	<u>D</u>	%Rec			
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid)-39126/3-A		Added	Result	Qualifier	mg/Kg		106	Limits		
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid)-39126/3-A		Added 250	Result 266.1	Qualifier	mg/Kg		106	Limits 90 - 110 Control		oluble
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335	0-39126/3-A		Added	Result 266.1 LCSD	Qualifier	mg/Kg		106	Limits 90 - 110 D Control Prep T		
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte)-39126/3-A		Added 250 Spike	Result 266.1 LCSD	Qualifier	mg/Kg Client Sar	mple	106	Limits 90 - 110 Control Prep T %Rec	ype: So	RPI Limi
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402-			Added 250 Spike Added	Result 266.1 LCSD Result	Qualifier	mg/Kg Client Sar Unit	nple	106 ID: Lak <u>%Rec</u> 104	Limits 90 - 110 Control Prep T %Rec Limits	ype: So <u>RPD</u> 3 Matrix 3	RPI Limi 20 Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid			Added 250 Spike Added	Result 266.1 LCSD Result	Qualifier	mg/Kg Client Sar Unit	nple	106 ID: Lak <u>%Rec</u> 104	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID:	ype: So <u>RPD</u> 3 Matrix 3	RPI Limi 20 Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid	-A-1-D MS Sample		Added 250 Spike Added	Result 266.1 LCSD Result 258.9	Qualifier	mg/Kg Client Sar Unit	nple	106 ID: Lak <u>%Rec</u> 104	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID:	ype: So <u>RPD</u> 3 Matrix 3	RPE Limi 20 Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335	-A-1-D MS Sample	Sample Qualifier	Added 250 Spike Added 250	Result 266.1 LCSD Result 258.9	Qualifier (LCSD Qualifier	mg/Kg Client Sar Unit	nple	106 ID: Lak <u>%Rec</u> 104	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID: Prep T	ype: So <u>RPD</u> 3 Matrix 3	RPE Limi 20 Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte	-A-1-D MS Sample		Added 250 Spike Added 250 Spike	Result 266.1 LCSD Result 258.9	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple	106 ID: Lak <u>%Rec</u> 104 ient Sa	Limits 90 - 110 Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec	ype: So <u>RPD</u> 3 Matrix 3	RPD Limit 20 Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid	-A-1-D MS Sample Result 195		Added 250 Spike Added 250 Spike Added	Result 266.1 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple _ D CI	106 ID: Lak <u>%Rec</u> 104 ient Sa <u>%Rec</u> 109	Limits 90 - 110 Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits	ype: So <u>RPD</u> 3 Matrix 3 ype: So ke Dup	Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid	-A-1-D MS Sample Result 195 -A-1-E MSD	Qualifier	Added 250 Spike Added 250 Spike Added 249	Result 266.1 LCSD Result 258.9 MS Result 466.5	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Client Sar Unit mg/Kg	nple _ D CI	106 ID: Lak <u>%Rec</u> 104 ient Sa <u>%Rec</u> 109	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spil Prep T	ype: So <u>RPD</u> 3 Matrix 3 ype: So ke Dup	Spike
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335	-A-1-D MS Sample Result 195 -A-1-E MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 249	Result 266.1 LCSD Result 258.9 MS Result 466.5	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Client Sar Unit mg/Kg Client S	nple _ D CI _ D	106 ID: Lak <u>%Rec</u> 104 ient Sa <u>%Rec</u> 109 Ie ID: N	Limits 90 - 110 Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spil Prep T %Rec	RPD 3 Matrix ype: So ke Dup ype: So	Spike oluble
Analysis Batch: 39335 Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335 Analyte Chloride	-A-1-D MS Sample Result 195 -A-1-E MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 249	Result 266.1 LCSD Result 258.9 MS Result 466.5	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Client Sar Unit mg/Kg	nple _ D CI	106 ID: Lak <u>%Rec</u> 104 ient Sa <u>%Rec</u> 109	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spil Prep T	ype: So <u>RPD</u> 3 Matrix 3 ype: So ke Dup	Spike

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QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

GC VOA

Prep Batch: 39013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3403-1	SS05	Total/NA	Solid	5035	
MB 880-39013/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39013/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39013/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3374-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3374-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39079/5-A	Method Blank	Total/NA	Solid	5035	

Analysis Batch: 39086

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3403-1	SS05	Total/NA	Solid	8021B	39013
MB 880-39013/5-A	Method Blank	Total/NA	Solid	8021B	39013
MB 880-39079/5-A	Method Blank	Total/NA	Solid	8021B	39079
LCS 880-39013/1-A	Lab Control Sample	Total/NA	Solid	8021B	39013
LCSD 880-39013/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39013
890-3374-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	39013
890-3374-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39013

Analysis Batch: 39252

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3403-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 39172

Lab Sample ID 890-3403-1	Client Sample ID	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3403-1	SS05	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172
Analysis Batch: 3939	9				

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3403-1	SS05	Total/NA	Solid	8015 NM	

8 9

Job ID: 890-3403-1

SDG: 03E1558068

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

HPLC/IC

Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3403-1	SS05	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39335

		D	Marked and		Dury Datab	
Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch	
890-3403-1	SS05	Soluble	Solid	300.0	39126	
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126	
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	39126	
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39126	

Job ID: 890-3403-1 SDG: 03E1558068

Initial

Amount

4.99 g

5 mL

10.04 g

1 uL

5.04 g

0 mL

Final

Amount

5 mL

5 mL

10 mL

1 uL

50 mL

1.0 mL

Batch

39013

39086

39252

39399

39172

39269

39126

39335

Number

Dil

1

1

1

1

1

Factor

Run

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS05 Date Collected: 11/07/22 12:00 Date Received: 11/07/22 14:17

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

Laboratory References:

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

Batch

5035

8021B

Total BTEX

8015NM Prep

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

8015 NM

8015B NM

DI Leach

300.0

Method

Job ID: 890-3403-1 SDG: 03E1558068

Lab Sample ID: 890-3403-1

Analyst

MNR

MNR

Prepared

or Analyzed

11/09/22 13:56

11/10/22 13:21

11/10/22 14:19 SM

11/14/22 09:30 SM

11/10/22 08:48 DM

11/11/22 15:07 SM

11/09/22 15:04 KS

11/12/22 03:25 CH

Matrix: Solid

Lab

EET MID

5
8
9
10
10 11

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3403-1

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date	
		ELAP	T104704400-22-24	06-30-23	
The following analyte	s are included in this rend	ort but the laboratory is r	not certified by the governing authority.	This list may include analytes for which	
the agency does not o			ior certified by the governing autionty.		
0,		Matrix	Analyte		
the agency does not o	offer certification.	, , , , , , , , , , , , , , , , , , ,	, , , , ,		

SDG: 03E1558068

Page 130 of 192

10

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3403-1 SDG: 03E1558068

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

Page 132 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H

Job ID: 890-3403-1
SDG: 03E1558068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3403-1	SS05	Solid	11/07/22 12:00	11/07/22 14:17	0.2'

5 W	1 Halloma	Relinquished by:	Notice: Signature of this (of service. Eurofins Xenc of Eurofins Xenco. A min	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed				6007	Sample Identification	Total Containers:	Sample Custody Seals:	Cooler Custody Seals:	Samples Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name:	Project Location:	Project Number:	Project Name:	Phone:	City, State ZIP:	Address:	Company Name:	Project Manager:	
	ð	(Signature)	document and relinqui to will be liable only fou imum charge of \$85.00	10 200.8 / 6020: nd Metal(s) to be ana							Is: Yes No		Yes	PT Temp Blank:		Julianna I	32.10974,	03E15	PLU 21 BD 125H	817-683-2503	Midland, TX 79701	601 N. Marienfeld Street, Suite 400	Ensolum, LLC	Kalei Jennings	
	ARCAR	C Receive	shment of samples court the cost of samples a will be applied to eac	20: analyzed				5 11-12	Matrix Sampled	Corrected	N/A Jemperature Reading:	-	No Thermometer ID:	ank: Yes No	2	Julianna Falcomata	32.10974, -103.88422	03E1558068	BD 125H		01	d Street, Suite 40			Environment Testing Xenco
<	6	Received by: (Signature)	nstitutes a valid pui ind shall not assum h project and a cha	8RCRA 13F TCLP / SPI				200	Time Sampled	Corrected Temperature:	re Reading:	Factor:	ter ID:	Wet Ice:	the lab, if recei	TAT starts the	Due Date:	Routine	Turn A	Email: K	0		0	B	sting
		ıre)	rchase order from one any responsibilitinge of \$5 for each s	13PPM Texas 11 SPLP 6010: 8RCF				<i>.2</i> : C	th Grab/ Comp	5.4	0.0	0	LOO MN	Yes No	the lab, if received by 4:30pm	day received by		Rush	Turn Around	jennings@ens	City, State ZIP:	Address:	Company Name:	Bill to: (if different)	Midland, EL Pas Hobbs
	1-1-20 1-1	Date/Time	silent company to Eurofin y for any losses or expension sample submitted to Europ	1 Al Sb As Ba B RA Sb As Ba B				×	BTEX			P	araı	nete	rs			Code		kjennings@ensolum.com, bbelill@ensolum.com	Carlsbad, NM 88220	3104 E. Greene Street	XTO Energy, Inc	Garret Green	TX (432) 704-5440, Sar so, TX (915) 585-3443, L , NM (575) 392-7550, Ca
σ		Relinquished by: (Sig	s Xenco, its affiliates and subcontract ses incurred by the client if such loss fins Xenco, but not analyzed. These t	RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb I TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni					CHLO		_	890-3403							ANALYSIS F	ensolum.com	8220	Street	Ģ		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
		gnature) Received b	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 condutions 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	Fe Pb Mg Mn Mo Ni K Se Mo Ni Se Ag TI U								Chain of Custody							REQUEST	Deliverables: EDD		State of Project: NM	Program: UST/PST PRP	5	Work C
7		Received by: (Signature)	sonations the control sly negotiated.	Se Ag SiO ₂ Na Sr TI Sn U V Hg: 1631 / 245.1 / 7470 / 7471			Cost Ce		Sam	NaUH+ASCO	Zn Acetate+NaUH: Zn	Na22203 NaSO3	NaHSU, NABIS	H ₃ PO ₄ : HP	H ₂ SO ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Pres	ADaP1 L Other:			RP Brownfields LRC	k Order Comm	Work Order No:
Revised Date: 08/25/2020 Rev. 2020		Date/Time		5n U V Zn 0 / 7471			Cost Center: 1666421001		Sample Comments	NaUH+ASCUIDIC ACIO. SAFC	VaCH: Zn	SU3	BIS	5	NaOH: Na	HNO3: HN	MeOH: Me	DI Water: H ₂ O	Preservative Codes	er:			C Juperfund		of

5 6

12 13 14

Chain of Custody

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3403 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

The cooler's custody seal, if present, is intact.

Sample custody seals, if present, are intact.

Login Sample Receipt Checklist

Client: Ensolum

Question

Login Number: 3403 List Number: 2 Creator: Rodriguez, Leticia

List Source: Eurofins Midland 5 6 7 8 9 10 11 12 13 14 List Creation: 11/09/22 10:47 AM Comment Answer N/A N/A The cooler or samples do not appear to have been compromised or True

tampered with.	
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
Sample collection date/times are provided. Appropriate sample containers are used.	True True
Appropriate sample containers are used.	True
Appropriate sample containers are used. Sample bottles are completely filled.	True True
Appropriate sample containers are used. Sample bottles are completely filled. Sample Preservation Verified. There is sufficient vol. for all requested analyses, incl. any requested	True True N/A

Job Number: 890-3403-1 SDG Number: 03E1558068

Received by OCD: 11/30/2022 7:27:20 AM

15

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/21/2022 2:59:29 PM Revision 1

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies

Received by OCD: 11/30/2022 7:27:20 AM



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/21/2022 3:00:35 PM Revision 1

JOB DESCRIPTION

PLU 21 BD 125H SDG NUMBER 03E1558068

JOB NUMBER

890-3404-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



Laboratory Job ID: 890-3404-1 SDG: 03E1558068

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	6
Surrogate Summary	7
QC Sample Results	8
QC Association Summary	14
Lab Chronicle	16
Certification Summary	17
Method Summary	18
Sample Summary	19
Chain of Custody	20
Receipt Checklists	21
Appendix	23

Definitions/Glossary

Client: Ensolum Project/Site: PLU 21 BD 125H Page 139 of 192

Job ID: 890-3404-1
SDG: 03E1558068

-1:6:

NEG

POS

PQL

PRES

QC

RER

RPD

TEF TEQ

TNTC

RL

Qualifiers		3
GC VOA		
Qualifier	Qualifier Description	4
F1	MS and/or MSD recovery exceeds control limits.	
S1-	Surrogate recovery exceeds control limits, low biased.	5
S1+	Surrogate recovery exceeds control limits, high biased.	
U	Indicates the analyte was analyzed for but not detected.	
GC Semi VO	A	
Qualifier	Qualifier Description	7
*1	LCS/LCSD RPD exceeds control limits.	
S1+	Surrogate recovery exceeds control limits, high biased.	8
U	Indicates the analyte was analyzed for but not detected.	
HPLC/IC		9
Qualifier	Qualifier Description	
U	Indicates the analyte was analyzed for but not detected.	
Glossary		
Abbreviation	These commonly used abbreviations may or may not be present in this report.	
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis	
%R	Percent Recovery	
CFL	Contains Free Liquid	
CFU	Colony Forming Unit	
CNF	Contains No Free Liquid	
DER	Duplicate Error Ratio (normalized absolute difference)	
Dil Fac	Dilution Factor	
DL	Detection Limit (DoD/DOE)	
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample	
DLC	Decision Level Concentration (Radiochemistry)	
EDL	Estimated Detection Limit (Dioxin)	
LOD	Limit of Detection (DoD/DOE)	
LOQ	Limit of Quantitation (DoD/DOE)	
MCL	EPA recommended "Maximum Contaminant Level"	
MDA	Minimum Detectable Activity (Radiochemistry)	
MDC	Minimum Detectable Concentration (Radiochemistry)	
MDL	Method Detection Limit	
ML	Minimum Level (Dioxin)	
MPN	Most Probable Number	
MQL	Method Quantitation Limit	
NC	Not Calculated	
ND	Not Detected at the reporting limit (or MDL or EDL if shown)	

Negative / Absent

Positive / Present

Presumptive

Quality Control

Practical Quantitation Limit

Relative Error Ratio (Radiochemistry)

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

Reporting Limit or Requested Limit (Radiochemistry)

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

Job ID: 890-3404-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3404-1

REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS04 (890-3404-1).

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCS 880-38960/1-A) and (LCSD 880-38960/2-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (880-21141-A-21-E MS) and (880-21141-A-21-F MSD). 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: (MB 880-38960/5-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (880-21141-A-21-G). 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: SS04 (890-3404-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39022 and analytical batch 880-39343 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39138 and analytical batch 880-39343 was outside the upper control limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

4

Page 140 of 192

Case Narrative

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3404-1 SDG: 03E1558068

Job ID: 890-3404-1 (Continued)

Laboratory: Eurofins Carlsbad (Continued)

HPLC/IC

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

Client Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS04 Date Collected: 11/07/22 11:55

Date Received: 11/07/22 14:17 Sample Depth: 0.2'

Method: SW846 8021B - Vola	tile Organic	Compound	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00199	U	0.00199	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/08/22 09:56	11/10/22 22:29	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	238	S1+	70 - 130			11/08/22 09:56	11/10/22 22:29	1
1,4-Difluorobenzene (Surr)	69	S1-	70 - 130			11/08/22 09:56	11/10/22 22:29	1

Method: TAL SOP Total BTEX - Total BTEX Calculation										
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/11/22 09:54	1		

Method: SW846 8015 NM - Di	esel Range Organic	s (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<49.9 U	49.9	mg/Kg			11/14/22 09:30	1	

Method: SW846 8015B NM - D	Diesel Range	• Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U *1	49.9	mg/Kg		11/10/22 08:48	11/11/22 15:28	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		11/10/22 08:48	11/11/22 15:28	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		11/10/22 08:48	11/11/22 15:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			11/10/22 08:48	11/11/22 15:28	1
o-Terphenyl	94		70 - 130			11/10/22 08:48	11/11/22 15:28	1
_ Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatogra	ohy - Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14.0		5.00	mg/Kg			11/12/22 03:30	1

Job ID: 890-3404-1 SDG: 03E1558068

Lab Sample ID: 890-3404-1

Matrix: Solid

Surrogate Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC) Matrix: Solid

-			Pe
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
880-21141-A-21-E MS	Matrix Spike	227 S1+	87
880-21141-A-21-F MSD	Matrix Spike Duplicate	216 S1+	92
890-3392-A-1-C MS	Matrix Spike	95	111
890-3392-A-1-D MSD	Matrix Spike Duplicate	89	115
890-3404-1	SS04	238 S1+	69 S1-
LCS 880-38960/1-A	Lab Control Sample	171 S1+	72
LCS 880-39138/1-A	Lab Control Sample	93	112
LCSD 880-38960/2-A	Lab Control Sample Dup	156 S1+	70
LCSD 880-39138/2-A	Lab Control Sample Dup	108	112
MB 880-38960/5-A	Method Blank	140 S1+	74
MB 880-39022/5-A	Method Blank	60 S1-	99
MB 880-39138/5-A	Method Blank	59 S1-	99
Surrogate Legend			
BFB = 4-Bromofluorobe	enzene (Surr)		
DFBZ = 1,4-Difluorober	()		

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

		Percent Surrogate Recovery (Acceptance Limits)						
		1CO1	OTPH1					
Lab Sample ID	Client Sample ID	(70-130)	(70-130)					
890-3402-A-1-G MS	Matrix Spike	86	79					
890-3402-A-1-H MSD	Matrix Spike Duplicate	82	73					
890-3404-1	SS04	91	94					
LCS 880-39172/2-A	Lab Control Sample	94	97					
LCSD 880-39172/3-A	Lab Control Sample Dup	107	109					
MB 880-39172/1-A	Method Blank	119	134 S1+					

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Eurofins Carlsbad

Page 143 of 192

Job ID: 890-3404-1 SDG: 03E1558068

Prep Type: Total/NA

Prep Type: Total/NA 5 6

Lab Sample ID: MB 880-38960/5-A

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 39229							Prep Type: To Prep Batch:
	MB	MB					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed
Benzene	<0.00200	U	0.00200	mg/Kg		11/08/22 09:56	11/10/22 15:54
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/22 09:56	11/10/22 15:54
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/22 09:56	11/10/22 15:54
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/22 09:56	11/10/22 15:54
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/22 09:56	11/10/22 15:54
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/22 09:56	11/10/22 15:54

	MB	MB	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130
1,4-Difluorobenzene (Surr)	74		70 - 130

Lab Sample ID: LCS 880-38960/1-A Matrix: Solid Analysis Batch: 39229

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1206		mg/Kg		121	70 - 130	
Toluene	0.100	0.1189		mg/Kg		119	70 - 130	
Ethylbenzene	0.100	0.1271		mg/Kg		127	70 - 130	
m-Xylene & p-Xylene	0.200	0.2552		mg/Kg		128	70 - 130	
o-Xylene	0.100	0.1256		mg/Kg		126	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	171	S1+	70 - 130
1,4-Difluorobenzene (Surr)	72		70 - 130

Lab Sample ID: LCSD 880-38960/2-A Matrix: Solid

Analysis Batch: 39229 Prep Batch: 38960 LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit Benzene 0.100 0.1171 mg/Kg 117 70 - 130 3 35 Toluene 0.100 0.1087 mg/Kg 109 70 - 130 9 35 Ethylbenzene 0.100 0.1197 mg/Kg 120 70 - 130 6 35 0.200 m-Xylene & p-Xylene 0.2402 mg/Kg 120 70 - 130 6 35 o-Xylene 0.100 0.1216 mg/Kg 122 70 - 130 3 35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	156	S1+	70 - 130
1,4-Difluorobenzene (Surr)	70		70 - 130

Lab Sample ID: 880-21141-A-21-E MS Matrix: Solid

Matrix: Solid Analysis Batch: 39229										pe: Total/NA atch: 38960
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.100	0.1425	F1	mg/Kg		142	70 - 130	
Toluene	<0.00201	U	0.100	0.1263		mg/Kg		126	70 - 130	

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Client Sample ID: Matrix Spike

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 38960

Analyzed

11/08/22 09:56 11/10/22 15:54

11/08/22 09:56 11/10/22 15:54

Released to Imaging: 2/22/2023 2:12:01 PM

11/21/2022 (Rev. 1)

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

Prepared
Client: Ensolum Project/Site: PLU 21 BD 125H

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

Lab Sample ID: 880-2114 Matrix: Solid Analysis Batch: 39229	1-A-21-E MS						CI	ient Sa	mple ID: I Prep Ty Prep E		al/NA
	Sample	Sample	Spike	MS	MS				%Rec		
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits		
Ethylbenzene	< 0.00201	U F1	0.100	0.1354	F1	mg/Kg		135	70 - 130		
m-Xylene & p-Xylene	< 0.00402	U F1	0.200	0.2734	F1	mg/Kg		136	70 - 130		
o-Xylene	<0.00201	U F1	0.100	0.1399	F1	mg/Kg		140	70 - 130		
	MS	MS									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	227	S1+	70 - 130								
1,4-Difluorobenzene (Surr)	87		70 - 130								
_ Lab Sample ID: 880-2114	1-A-21-F MS	D				Client S	Samp	le ID: N	latrix Spil	ke Dup	licate
Matrix: Solid									Prep Ty		
Analysis Batch: 39229										atch: 3	
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	< 0.00201	U F1	0.0990	0.1280		mg/Kg		129	70 - 130	11	35
Toluene	<0.00201	U	0.0990	0.1220		mg/Kg		123	70 - 130	3	35
Ethylbenzene	<0.00201	U F1	0.0990	0.1185		mg/Kg		120	70 - 130	13	35

0.198

0.0990

0.2403

0.1268

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	216	S1+	70 - 130
1,4-Difluorobenzene (Surr)	92		70 - 130

<0.00402 UF1

<0.00201 UF1

--- ---

Lab Sample ID: MB 880-39022/5-A Matrix: Solid Analysis Batch: 39343

m-Xylene & p-Xylene

o-Xylene

MB	MB						
Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
ene <0.00400	U	0.00400	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
<0.00400	U	0.00400	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
MB	MR						
	Result <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200 <0.00200	<0.00200 U <0.00400 U	Result Qualifier RL <0.00200 U 0.00200 <0.00200 U 0.00400 <0.00200 U 0.00200 <0.00200 U 0.00200 <0.00200 U 0.00200 <0.00400 U 0.00400	Result Qualifier RL Unit <0.00200 U 0.00200 mg/Kg <0.00200 U 0.00200 mg/Kg <0.00200 U 0.00200 mg/Kg <0.00200 U 0.00200 mg/Kg <0.00200 U 0.00400 mg/Kg <0.00200 U 0.00400 mg/Kg <0.00200 U 0.00200 mg/Kg <0.00400 U 0.00400 mg/Kg	Result Qualifier RL Unit D <0.00200 U 0.00200 mg/Kg mg/Kg	Result Qualifier RL Unit D Prepared <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 ene <0.00400 U 0.00200 mg/Kg 11/08/22 15:10 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 <0.00400 U 0.00400 mg/Kg 11/08/22 15:10	Result Qualifier RL Unit P Prepared Analyzed <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 11/11/22 18:42 ene <0.00400 U 0.00200 mg/Kg 11/08/22 15:10 11/11/22 18:42 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 11/11/22 18:42 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 11/11/22 18:42 <0.00200 U 0.00200 mg/Kg 11/08/22 15:10 11/11/22 18:42 <0.00400 U 0.00400 mg/Kg 11/08/22 15:10 11/11/22 18:42

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	60	S1-	70 - 130		
1,4-Difluorobenzene (Surr)	99		70 - 130		

Lab Sample ID: MB 880-39138/5-A Matrix: Solid **Analysis Batch: 39343**

-	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 15:29	11/12/22 08:23	1

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Job ID: 890-3404-1 SDG: 03E1558068

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 39022

Analyzed

Dil Fac

1

1

70 - 130

70 - 130

13

10

35

35

121

128

Prepared

11/08/22 15:10 11/11/22 18:42

11/08/22 15:10 11/11/22 18:42

Client Sample ID: Method Blank

mg/Kg

mg/Kg

Prep Type: Total/NA

Prep Batch: 39138

Lab Sample ID: MB 880-39138/5-A

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Analysis Batch: 39343

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Matrix: Solid

Analyte

o-Xylene

Surrogate

Xylenes, Total

Method: 8021B - Volatile Organic Compour

MB MB

MB MB %Recovery Qualifier

59 S1-

99

<0.00200 U

<0.00400 U

Result Qualifier

				le ID: Methoo Prep Type: To Prep Batch:	otal/NA
RL	Unit	D	Prepared	Analyzed	Dil Fac
0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
0.00400	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Limits			Prepared	Analyzed	Dil Fac
70 - 130			11/09/22 15:29	11/12/22 08:23	1
70 - 130			11/09/22 15:29	11/12/22 08:23	1
		Client	Sample ID:	Lab Control S	Sample
				Prep Type: To Prep Batch:	otal/NA

Lab Sample ID: LCS 880-39138/1-A Matrix: Solid Analysis Batch: 39343

Analysis Daton. 00040							т тер Ба	
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09491		mg/Kg		95	70 - 130	
Toluene	0.100	0.09455		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.08730		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-39138/2-A Matrix: Solid Analysis Batch: 39343

Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA Prep Batch: 39138

	Spike	LCSD LCSI	D		%Rec		RPD
Analyte	Added	Result Qual	ifier Unit	D %Rec	Limits	RPD	Limit
Benzene	0.100	0.08952	mg/Kg	90	70 - 130	6	35
Toluene	0.100	0.09075	mg/Kg	91	70 - 130	4	35
Ethylbenzene	0.100	0.08974	mg/Kg	90	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2057	mg/Kg	103	70 - 130	7	35
o-Xylene	0.100	0.1104	mg/Kg	110	70 - 130	14	35

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 890-3392-A-1-C MS Matrix: Solid Analysis Batch: 393/3

Analysis Batch: 39343									Prep I	Batch: 39138
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.08927		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.100	0.08382		mg/Kg		83	70 - 130	
Ethylbenzene	<0.00201	U	0.100	0.07488		mg/Kg		75	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1635		mg/Kg		81	70 - 130	
o-Xylene	<0.00201	U	0.100	0.08493		mg/Kg		85	70 - 130	

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Client Sample ID: Matrix Spike

Prep Type: Total/NA

Job ID: 890-3404-1

SDG: 03E1558068

Client: Ensolum Project/Site: PLU 21 BD 125H

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

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 890-3392-A-1-D MSD Matrix: Solid

Analysis Batch: 39343									Prep E	Batch: 3	39138
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0990	0.07916		mg/Kg		80	70 - 130	12	35
Toluene	<0.00201	U	0.0990	0.07843		mg/Kg		79	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.0990	0.07188		mg/Kg		73	70 - 130	4	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1570		mg/Kg		79	70 - 130	4	35
o-Xylene	<0.00201	U	0.0990	0.08045		mg/Kg		81	70 - 130	5	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	89		70 - 130								
1,4-Difluorobenzene (Surr)	115		70 - 130								

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

Lab Sample ID: MB 880-3917 Matrix: Solid Analysis Batch: 39269	2/1-А МВ	МВ					le ID: Methoo Prep Type: To Prep Batch	otal/NA
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	119		70 - 130			11/10/22 08:48	11/11/22 09:30	1
o-Terphenyl	134	S1+	70 - 130			11/10/22 08:48	11/11/22 09:30	1
Lab Sample ID: LCS 880-3917 Matrix: Solid	72/2-A				Clien		Lab Control S Prep Type: To	

Analysis Batch: 39269 Prep Batch: 39172 LCS LCS Spike %Rec Analyte Added Limits **Result Qualifier** Unit D %Rec Gasoline Range Organics 1000 815.5 mg/Kg 82 70 - 130 (GRO)-C6-C10 1000 846.7 **Diesel Range Organics (Over** mg/Kg 85 70 - 130 C10-C28)

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	97		70 - 130

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

Client Sample ID: Matrix Spike Duplicate

Job ID: 890-3404-1

SDG: 03E1558068

Prep Batch: 39138

Prep Type: Total/NA

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3404-1 SDG: 03E1558068

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

		Spike		LCSD	11-24	-	0/ D	%Rec	Batch: 3	RPD
		Added		Qualifier	Unit	D	%Rec	Limits	RPD	Limit
		1000	1003		mg/Kg		100	70 - 130	21	20
		1000	950.2		ma/Ka		95	70 - 130	12	20
1000	1050									
		l imits								
	guunner									
-1-G MS						CI	ient Sa	mple ID:	Matrix 3	Spike
								Prep Ty	pe: Tot	al/NA
								Prep E	Batch: 3	39172
Sample	Sample	Spike	MS	MS				%Rec		
		Added	Result	Qualifier	Unit	D	%Rec	Limits		
55.1	*1	997	1007		mg/Kg		95	70 - 130		
<50.0	U	997	861.7		mg/Kg		84	70 - 130		
MS	MS									
%Recovery	Qualifier	Limits								
86		70 - 130								
79		70 - 130								
-1-H MSD					Client S	amp	le ID: N	latrix Spil	ke Dup	licate
									-	
Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20
<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	20
MSD	MSD									
MSD %Recovery	MSD Qualifier	Limits								
	%Recovery 107 109 1-G MS Sample Result 55.1 <50.0 MS %Recovery 86 79 1-H MSD Sample Result 55.1	109 Sample Result Sample Qualifier55.1*1<50.0	%Recovery Qualifier Limits 107 70 - 130 70 - 130 109 70 - 130 70 - 130 A-1-G MS Sample Spike Result Qualifier Added 55.1 *1 997 <50.0	$\frac{1000}{950.2}$ $\frac{LCSD}{\sqrt[6]{Recovery}} \frac{Qualifier}{Qualifier} \frac{Limits}{70-130}}{70-130}$ s-1-G MS $\frac{Sample}{Result} \frac{Sample}{1007} \frac{Spike}{997} \frac{MS}{1007}$ $< 50.0 U 997 861.7$ $\frac{MS}{\sqrt[6]{Recovery}} \frac{Qualifier}{1007} \frac{Limits}{70-130}}{70-130}$ s-1-H MSD $\frac{Sample}{Result} \frac{Sample}{200} \frac{Spike}{70-130}$ $\frac{Sample}{1007} \frac{Spike}{1007} \frac{MSD}{70-130}$ $\frac{Sample}{1007} \frac{Spike}{1007} \frac{MSD}{70-130}$	LCSD LCSD LCSD Minite Minit Minit Minit	1000 950.2 mg/Kg LCSD LCSD Qualifier Limits 107 70 - 130 70 - 130 109 70 - 130 70 - 130 J09 70 - 130 70 - 130 sample Sample Spike MS MS Result Qualifier Added Result Qualifier Unit 55.1 *1 997 861.7 mg/Kg <50.0	$\frac{1000}{950.2} mg/Kg$ $\frac{LCSD}{\frac{Kg}{2}} \frac{LCSD}{\frac{M}{2}} \frac{Qualifier}{107} \frac{Limits}{70.130}}{109} \frac{100}{70.130}$ $\frac{100}{70.130} \frac{100}{70.130} \frac{100}{70.130} \frac{100}{70.130} \frac{100}{1007} \frac{100}{1$	$\frac{1000}{950.2} \text{ mg/Kg} 95$ $\frac{LCSD}{\frac{Kecovery}{107}} \frac{Qualifier}{107} \frac{Limits}{70.130}}{70.130}$ $\frac{1.1-G \text{ MS}}{109} \text{ To - 130}$ $\frac{Sample}{55.1} \frac{Sample}{*1} \frac{Spike}{997} \frac{MS}{1007} \frac{MS}{1007} \frac{MS}{mg/Kg} \frac{D}{9} \frac{\%Rec}{95}$ $\frac{MS}{55.0} U 997 861.7 \text{ mg/Kg} 84$ $\frac{MS}{\frac{Kecovery}{86}} \frac{Qualifier}{70.130}}{70.130}$ $\frac{MS}{79} \frac{MS}{70.130}$ $\frac{Kg}{70.130} \text{ Sclient Sample ID: N}$ $\frac{Sample}{S5.1} \frac{Sample}{*1} \frac{Spike}{200} \frac{MSD}{70.130} \frac{MSD}{mg/Kg} \frac{D}{9} \frac{\%Rec}{92}$	$\frac{1000}{950.2} \text{ mg/Kg} 95 70-130$ $\frac{LCSD}{NRecovery} \frac{Qualifier}{107} \frac{Limits}{70-130}$ $\frac{109}{70-130} 70-130$ $\frac{1-1-G \text{ MS}}{109} \frac{Sample}{70-130}$ $\frac{Sample}{Sample} \frac{Sample}{1007} \frac{Spike}{1007} \frac{MS}{1007} \frac{MS}{mg/Kg} \frac{D}{95} \frac{\sqrt{Rec}}{95} \frac{Limits}{70-130}$ $\frac{\sqrt{S}}{70-130} \frac{MS}{79} \frac{MS}{70-130}$ $\frac{MS}{79} \frac{MS}{70-130}$ $\frac{MS}{79} \frac{MS}{70-130}$ $\frac{MS}{79} \frac{MS}{70-130}$ $\frac{Client Sample ID: Matrix Spi}{Prep IV}$ $\frac{Sample}{Sample} \frac{Sample}{Qualifier} \frac{Limits}{70-130}$ $\frac{Client Sample ID: Matrix Spi}{Prep IV}$ $\frac{Sample}{Sin} \frac{Sample}{Qualifier} \frac{Spike}{Added} \frac{MSD}{Result} \frac{MSD}{Qualifier} \frac{Unit}{mg/Kg} \frac{D}{92} \frac{\sqrt{Rec}}{20}$	1000 950.2 mg/Kg 95 70.130 12 LCSD MRecovery 107 109 Qualifier 70.130 Limits 70.130 Client Sample ID: Matrix 5 Prep Type: Tot

Method: 300.0 - Anions, Ion Chromatography

73

Lab Sample ID: MB 880-39126/1-A Matrix: Solid Analysis Batch: 39335						Client Sam	ple ID: Method Prep Type: \$	
	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			11/12/22 02:56	1

70 - 130

Eurofins Carlsbad

-

o-Terphenyl

Client: Ensolum

Method: 300.0 - Anions, Ion Chromatography (Continued)

RPD

Lab Sample ID: LCS 880-39126/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble** Analysis Batch: 39335 LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 266.1 mg/Kg 106 90 - 110 Lab Sample ID: LCSD 880-39126/3-A **Client Sample ID: Lab Control Sample Dup Matrix: Solid Prep Type: Soluble** Analysis Batch: 39335 Spike LCSD LCSD %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 258.9 mg/Kg 104 90 - 110

Chloride			250	258.9		mg/Kg		104	90 - 110	3	20	
Lab Sample ID: 890-34 Matrix: Solid	02-A-1-D MS						CI	ient Sa	mple ID: I Prep Ty			
Analysis Batch: 39335												
	Sample	Sample	Spike	MS	MS				%Rec			
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Chloride	195		249	466.5		mg/Kg		109	90 - 110			5
Lab Sample ID: 890-34	02-A-1-E MSD					Client S	Samp	le ID: N	latrix Spil	ke Dup	licate	
Matrix: Solid									Prep T	ype: So	oluble	
Analysis Batch: 39335												
-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	195		249	456.2		mg/Kg		105	90 - 110	2	20	

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RPD Limit 20

Released to Imaging: 2/22/2023 2:12:01 PM

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

GC VOA

Prep Batch: 38960

Page	150	of 1	92

Job ID: 890-3404-1 SDG: 03E1558068

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3404-1	SS04	Total/NA	Solid	5035	
MB 880-38960/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-38960/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-38960/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21141-A-21-E MS	Matrix Spike	Total/NA	Solid	5035	
880-21141-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
Prep Batch: 39022					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
MB 880-39022/5-A	Method Blank	Total/NA	Solid	5035	
Prep Batch: 39138					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
MB 880-39138/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39138/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39138/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3392-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3392-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
Analysis Batch: 39229)				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-3404-1	SS04	Total/NA	Solid	8021B	3896
MB 880-38960/5-A	Method Blank	Total/NA	Solid	8021B	3896
LCS 880-38960/1-A	Lab Control Sample	Total/NA	Solid	8021B	3896
LCSD 880-38960/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3896
880-21141-A-21-E MS	Matrix Spike	Total/NA	Solid	8021B	3896
880-21141-A-21-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3896
Analysis Batch: 3930	•				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3404-1	SS04	Total/NA	Solid	Total BTEX	
Analysis Batch: 39343	3				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
MB 880-39022/5-A	Method Blank	Total/NA	Solid	8021B	3902
MB 880-39138/5-A	Method Blank	Total/NA	Solid	8021B	3913
LCS 880-39138/1-A	Lab Control Sample	Total/NA	Solid	8021B	3913
LCSD 880-39138/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	3913
890-3392-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	3913
890-3392-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	3913
GC Semi VOA					
Prep Batch: 39172					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batc
890-3404-1	SS04	Total/NA	Solid	8015NM Prep	

Lab Sample ID	Client Sample ID	Ргер Туре	Matrix	Method	Prep Batch
890-3404-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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8

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

GC Semi VOA

Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3404-1	SS04	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172
Analysis Batch: 3940	00				
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3404-1	SS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3404-1	SS04	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3404-1	SS04	Soluble	Solid	300.0	39126
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	39126
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39126

Page 151 of 192

8

Job ID: 890-3404-1 SDG: 03E1558068 Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS04 Date Collected: 11/07/22 11:55 Date Received: 11/07/22 14:17

Page 152 of 192

Job ID: 890-3404-1 SDG: 03E1558068

Lab Sample ID: 890-3404-1

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			5.03 g	5 mL	38960	11/08/22 09:56	MNR	EET MID	- 5
Total/NA	Analysis	8021B		1	5 mL	5 mL	39229	11/10/22 22:29	MNR	EET MID	
Total/NA	Analysis	Total BTEX		1			39309	11/11/22 09:54	SM	EET MID	
Total/NA	Analysis	8015 NM		1			39400	11/14/22 09:30	SM	EET MID	
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39172	11/10/22 08:48	DM	EET MID	
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39269	11/11/22 15:28	SM	EET MID	
Soluble	Leach	DI Leach			5 g	50 mL	39126	11/09/22 15:04	KS	EET MID	
Soluble	Analysis	300.0		1	0 mL	1.0 mL	39335	11/12/22 03:30	СН	EET MID	

Laboratory References:

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

Eurofins Carlsbad

Released to Imaging: 2/22/2023 2:12:01 PM

Accreditation/Certification Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3404-1 SDG: 03E1558068

Laboratory: Eurofins Midland

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

thority		ogram	Identification Number	Expiration Date
Texas	as NELA		T104704400-22-24	06-30-23
The following enclute:	are included in this rene	rt hut the leheratory is r	at partified by the governing outbority	This list may include analytes for whic
the agency does not c	•	rt, but the laboratory is r	tot certilled by the governing autionty.	
• •	•	Matrix	Analyte	
the agency does not o	offer certification.		, , , , , ,	

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Page 153 of 192

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3404-1 SDG: 03E1558068

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

Page 155 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H

Job ID: 890-3404-1
SDG: 03E1558068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3404-1	SS04	Solid	11/07/22 11:55	11/07/22 14:17	0.2'

	5
_	8
	9
1	2
1	13

Relinquished by:	Notice: Signature of this d of service. Eurofins Xenco of Eurofins Xenco. A minit	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed					FSDY	Sample Identification	Total Containers:	Sample Custody Seals:	Cooler Custody Seals:	Samples Received Intact:	SAMPLE RECEIPT	PO #	Sampler's Name:	Project Location:	Project Number:	Project Name:		City, State ZIP: 1			Project Manager:	
(Signature)	ocument and relingu o will be liable only for mum charge of \$85.0	10 200.8 / 6020: d Metal(s) to be ana								s: Yes No	Yes No	and '	T Jemp Blank:		Julianna	32.10974.	03E1	PLU 21	817-683-2503	Midland, TX 79701	601 N. Marienfeld Street, Suite 400	Ensolum, LLC	Kalei Jennings	Xe
Alve C	ilshment of samples or the cost of sample)0 will be applied to	020: analyzed					S 11-7-22	Matrix Date Sampled	Correcte	NE	NIA	No Thermor	(Yek		Julianna Falcomata	32.10974, -103.88422	03E1558068	PLU 21 BD 125H		701	ld Street, Suite			Xenco
ived by: (Signature)	constitutes a valid es and shall not ass each project and a c	8RCRA 1 TCLP/S					2 1165	Time Sampled	Corrected Temperature:	Temperature Reading:	Correction Factor:	Thermometer ID:	No Wet Ice:	the lab, if re	TAT starts th	Due Date:	 Routine 	Tun	Emailt		400			0
ature)	purchase order fro ume any responsib charge of \$5 for eac	13PPM Texas 11 SPLP 6010: 8RCI		_			2 0	Depth Grab/ Comp	5.2	10.0	-0.2	FOOWN	(Yes No	the lab, if received by 4:30pm	TAT starts the day received by		Rush	Turn Around	kjennings@e	City, State ZIP:	Address:	Company Name	Bill to: (if different)	Hot
	m client c pility for ar ch sample	11 AI					4	/ # of Cont		L	Pa	arar	nete	I			Code		nsolum.			.0.	nt)	Paso, TX bbs, NM (
Date/Time	ompany to Eurofins X ny losses or expenses submitted to Eurofin	Sb As Ba Be Sb As Ba Be					×	BTEX TPH CHLOI	RIDE	s			_						kjennings@ensolum.com, bbelill@ensolum.com	Carlsbad, NM 88220	3104 E. Greene Street	XTO Energy, Inc.	Garret Green	915) 585-3443, Lub 575) 392-7550, Carls
Relinquished by: (Signature)	nco, its affiliates and subcontracto incurred by the client if such losses Xenco, but not analyzed. These ten	RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni							_	890-3404 C				-				ANALYSIS RE	solum.com	20	reet			Midialind, TA (43-27) 704-0440, Sair Alinuniun, TA (4107) 200-0004 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199
ature) Received by: (Signature)	Notce: 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	Mg Mn Mo Ni K Se Se Ag Ti U							_	Chain of Custody								REQUEST	Deliverables: EDD	Reporting: Level II Level III PST/UST TRRP L Level IV	State of Project: NM	Program: UST/PST PRP	Worl	www.xenco.com
Signature)	itions :ontrol egotiated.	Ag SiO ₂ Na Sr Ti Sn U V Hg: 1631/245.1/7470/7471			nAPP2214547737	Cost Center: 1666421001		Sample Comments	NaCH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na2S2U3: NASU3	NaHSO4: NABIS	H ₃ PO ₄ : HP	H ₂ SO ₄ : H ₂	HCL: HC HNO3: HN	Cool: Cool MeOH: Me	None: NO DI Water: H ₂ O	Preservative Codes	ADaPT LJ Other:	PST/UST I TRRP L		Brownfields BRC uperfund	Work Order Comments	co.com Page

13 14

Chain of Custody

Job Number: 890-3404-1 SDG Number: 03E1558068

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3404 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Job Number: 890-3404-1 SDG Number: 03E1558068

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3404 List Number: 2 Creator: Rodriguez, Leticia

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	

Received by OCD: 11/30/2022 7:27:20 AM

15

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/21/2022 3:00:35 PM Revision 1

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies



Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kalei Jennings Ensolum 705 W. Wadley Suite 210 Midland Texas 79701 Generated 11/23/2022 9:17:53 AM Revision 1

JOB DESCRIPTION

PLU 21 BD 125H SDG NUMBER 03E1558068

JOB NUMBER

890-3405-1

Eurofins Carlsbad 1089 N Canal St. Carlsbad NM 88220



SDG: 03E1558068

Laboratory Job ID: 890-3405-1

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Client Sample Results	5
Surrogate Summary	6
QC Sample Results	7
QC Association Summary	11
Lab Chronicle	13
Certification Summary	14
Method Summary	15
Sample Summary	16
Chain of Custody	17
Receipt Checklists	18
Appendix	20

Page 162 of 192

	Definitions/Glossary		
Client: Ensolu		Job ID: 890-3405-1	
Project/Site: F	PLU 21 BD 125H	SDG: 03E1558068	
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 VO	A		
Qualifier	Qualifier Description		
*1	LCS/LCSD RPD exceeds control limits.		
S1+	Surrogate recovery exceeds control limits, high biased.		
U	Indicates the analyte was analyzed for but not detected.		
HPLC/IC			
Qualifier	Qualifier Description		
U	Indicates the analyte was analyzed for but not detected.		
Glossary			
Abbreviation	These commonly used abbreviations may or may not be present in this report.		
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis		
%R	Percent Recovery		
CFL	Contains Free Liquid		
CFU	Colony Forming Unit		
CNF	Contains No Free Liquid		
DER	Duplicate Error Ratio (normalized absolute difference)		
Dil Fac	Dilution Factor		
DL	Detection Limit (DoD/DOE)		
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample		
DLC	Decision Level Concentration (Radiochemistry)		
EDL	Estimated Detection Limit (Dioxin)		
LOD	Limit of Detection (DoD/DOE)		
LOQ	Limit of Quantitation (DoD/DOE)		
MCL	EPA recommended "Maximum Contaminant Level"		
MDA	Minimum Detectable Activity (Radiochemistry)		
MDC	Minimum Detectable Concentration (Radiochemistry)		
MDL	Method Detection Limit		
ML	Minimum Level (Dioxin)		
MPN	Most Probable Number		
MQL	Method Quantitation Limit		
NC	Not Calculated		
ND	Not Detected at the reporting limit (or MDL or EDL if shown)		
NEG	Negative / Absent		
POS	Positive / Present		
PQL	Practical Quantitation Limit		
PRES	Presumptive		
QC	Quality Control		
RER	Relative Error Ratio (Radiochemistry)		
RL	Reporting Limit or Requested Limit (Radiochemistry)		

Toxicity Equivalent Factor (Dioxin)

Too Numerous To Count

Toxicity Equivalent Quotient (Dioxin)

RPD

TEF

TEQ

TNTC

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

Job ID: 890-3405-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3405-1

REVISION

The report being provided is a revision of the original report sent on 11/14/2022. The report (revision 1) is being revised due to Per client email, requesting sample ID name edit.

Report revision history

Receipt

The sample was received on 11/7/2022 2:17 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.8°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: SS07 (890-3405-1).

GC VOA

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39022 and analytical batch 880-39343 was outside the upper control limits.

Method 8021B: The surrogate recovery for the blank associated with preparation batch 880-39138 and analytical batch 880-39343 was outside the upper control limits.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-39172 and analytical batch 880-39269 was outside the upper control limits.

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-39172 and analytical batch 880-39269 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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.

4

Job ID: 890-3405-1 SDG: 03E1558068

Client Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS07 Date Collected: 11/07/22 12:10 Date Received: 11/07/22 14:17

Sample Depth: 0.2'

Method: SW846 8021B - Vo	latile Organic	Compoun	ds (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00199	U	0.00199	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/09/22 15:29	11/12/22 17:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	93		70 - 130			11/09/22 15:29	11/12/22 17:37	1
1,4-Difluorobenzene (Surr)	104		70 - 130			11/09/22 15:29	11/12/22 17:37	1

Method: TAL SOP Total BTEX	- Total BTE	X Calculat	ion					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/14/22 12:31	1

Method: SW846 8015 NM - Di	esel Range (Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	<50.0	U	50.0	mg/Kg			11/14/22 09:30	1	

Method: SW846 8015B NM - D	Diesel Range	• Organics	(DRO) (GC)					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		11/10/22 08:48	11/11/22 15:50	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 15:50	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 15:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			11/10/22 08:48	11/11/22 15:50	1
o-Terphenyl	96		70 - 130			11/10/22 08:48	11/11/22 15:50	1
_ Method: MCAWW 300.0 - Anio	ons, Ion Chr	omatogra	ohy - Soluble					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35.8		5.03	mg/Kg			11/12/22 03:35	1

5

|2 |3

Page 164 of 192

Job ID: 890-3405-1 SDG: 03E1558068

Lab Sample ID: 890-3405-1

Matrix: Solid

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC) **Matrix: Solid**

-			Per
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3392-A-1-C MS	Matrix Spike	95	111
890-3392-A-1-D MSD	Matrix Spike Duplicate	89	115
890-3405-1	SS07	93	104
LCS 880-39138/1-A	Lab Control Sample	93	112
LCSD 880-39138/2-A	Lab Control Sample Dup	108	112
MB 880-39022/5-A	Method Blank	60 S1-	99
MB 880-39138/5-A	Method Blank	59 S1-	99
Surrogato Logond			

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid

			Per	rcent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
5 Sample ID 0-3402-A-1-G MS	Client Sample ID Matrix Spike	<u>(70-130)</u> 86	(70-130) 79	
-3402-A-1-H MSD	Matrix Spike Duplicate	82	73	
3405-1	SS07	93	96	
30-39172/2-A	Lab Control Sample	94	97	
880-39172/3-A	Lab Control Sample Dup	107	109	
880-39172/1-A	Method Blank	119	134 S1+	

Surrogate Legend

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Job ID: 890-3405-1 SDG: 03E1558068

Prep Type: Total/NA

Prep Type: Total/NA

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Page 165 of 192

Lab Sample ID: MB 880-39022/5-A

QC Sample Results

Client: Ensolum Project/Site: PLU 21 BD 125H

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Analysis Batch: 39343							Prep Type: To Prep Batch:	
	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/08/22 15:10	11/11/22 18:42	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	60	S1-	70 - 130			11/08/22 15:10	11/11/22 18:42	1
1,4-Difluorobenzene (Surr)	99		70 - 130			11/08/22 15:10	11/11/22 18:42	1
Lab Sample ID: MB 880-39	138/5-A					Client Samp	le ID: Method	l Blank

Lab Sample ID: MB 880-39138/5-A Matrix: Solid Analysis Batch: 39343

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	< 0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/22 15:29	11/12/22 08:23	1
	MB	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	59	S1-	70 - 130			11/09/22 15:29	11/12/22 08:23	1
1,4-Difluorobenzene (Surr)	99		70 - 130			11/09/22 15:29	11/12/22 08:23	1

Lab Sample ID: LCS 880-39138/1-A Matrix: Solid Analysis Batch: 39343

Analysis Batch: 39343							Prep Batch: 3913	38
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09491		mg/Kg		95	70 - 130	_
Toluene	0.100	0.09455		mg/Kg		95	70 - 130	
Ethylbenzene	0.100	0.08730		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1927		mg/Kg		96	70 - 130	
o-Xylene	0.100	0.09563		mg/Kg		96	70 - 130	

	LCS	LCS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	93		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: LCSD 880-39138/2-A			C	Client Sar	nple	ID: Lab	Control		
Matrix: Solid							Prep Ty	pe: Tot	al/NA
Analysis Batch: 39343							Prep E	Batch: 3	39138
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08952		mg/Kg		90	70 - 130	6	35

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Prep Type: Total/NA Prep Batch: 39138

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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

Released to Imaging: 2/22/2023 2:12:01 PM

Client: Ensolum Project/Site: PLU 21 BD 125H

SDG: 03E1558068

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

Lab Sample ID: LCSD 880-39138/2-A Matrix: Solid Analysis Batch: 39343			Client Sa	mple	ID: Lat	b Control Sample Du Prep Type: Total/N Prep Batch: 3913			
-	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09075		mg/Kg		91	70 - 130	4	35
Ethylbenzene	0.100	0.08974		mg/Kg		90	70 - 130	3	35
m-Xylene & p-Xylene	0.200	0.2057		mg/Kg		103	70 - 130	7	35
o-Xylene	0.100	0.1104		mg/Kg		110	70 - 130	14	35
LCSD I	CSD								

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	108		70 - 130
1,4-Difluorobenzene (Surr)	112		70 - 130

Lab Sample ID: 890-3392-A-1-C MS Matrix: Solid Analysis Batch: 39343

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.100	0.08927		mg/Kg		89	70 - 130	
Toluene	<0.00201	U	0.100	0.08382		mg/Kg		83	70 - 130	
Ethylbenzene	<0.00201	U	0.100	0.07488		mg/Kg		75	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.201	0.1635		mg/Kg		81	70 - 130	
o-Xylene	<0.00201	U	0.100	0.08493		mg/Kg		85	70 - 130	

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	95		70 - 130
1,4-Difluorobenzene (Surr)	111		70 - 130

Lab Sample ID: 890-3392-A-1-D MSD Matrix: Solid Analysis Batch: 39343

Analysis Batch: 39343									Prep E	Batch: 3	39138
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00201	U	0.0990	0.07916		mg/Kg		80	70 - 130	12	35
Toluene	<0.00201	U	0.0990	0.07843		mg/Kg		79	70 - 130	7	35
Ethylbenzene	<0.00201	U	0.0990	0.07188		mg/Kg		73	70 - 130	4	35
m-Xylene & p-Xylene	<0.00402	U	0.198	0.1570		mg/Kg		79	70 - 130	4	35
o-Xylene	<0.00201	U	0.0990	0.08045		mg/Kg		81	70 - 130	5	35
	MSD	MSD									
Surrogate	%Recovery	Qualifier	Limits								
4-Bromofluorobenzene (Surr)	89		70 - 130								

70 - 130

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

115

Lab Sample ID: MB 880-39172/1-A Matrix: Solid Analysis Batch: 39269							le ID: Methoc Prep Type: To Prep Batch:	otal/NA
	MB	MB						
Analyte F	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/10/22 08:48	11/11/22 09:30	1

5

7

12 13

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Page 167 of 192

Client Sample ID: Matrix Spike Prep Type: Total/NA Prep Batch: 39138

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

1,4-Difluorobenzene (Surr)

Client: Ensolum Project/Site: PLU 21 BD 125H

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

Analysis Batch: 39269 MB MB MB MB MB MB MB MB MB Desci Range Organics (Over Analyzed D Prep Batch: 30 D Prep Batch: 30 D Diesel Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/10/22 08:48 11/11/22 09:30 11/11/22 09:3	Lab Sample ID: MB 880-39	172/1-A								Clie	ent Samp			
MB MB Analyte Result Qualifier Linit D Propared Analyzed D Diesel Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/10/22 08:48 11/11/12 09:30 D Surrogate 560.0 U 50.0 mg/Kg 11/10/22 08:48 11/11/12 09:30 D Surrogate 5/Accourty Qualifier Limits Propared Analyzed D 1-Chorocatane 11/10/22 08:43 11/11/12 09:30 11/11/12 09:30 11/11/12 09:30 D - Tenhonyi 134 S1+ 70 - 130 11/11/12 09:30 11/11/12 09:30 D - Cabo Sample 10: LCS 880-39172/2-A Client Sample 10: LCS 880-39172/2-A Client Sample 10: LCS 880-39172/3-A Client Sample 10: LCS 800 Prep Batch: 33 GRO-Do-C10 1000 846.7 mg/Kg B5 70 - 130 2 70 - 130 C10-0200 LCS LCS LCS LCS LCS LCS LCS LCS LCS Matrix: Solid %Rec	Matrix: Solid													
Analyte Result Qualifier RL Unit D Prepared Tit/1022 08.48 Analyzed Tit/1122 09.30 D C10-C28) CS0.0 U 50.0 mg/Kg 11/1022 08.48 11/1122 09.30 D C10-C28) CS0.0 U 50.0 mg/Kg 11/1022 08.48 11/1122 09.30 D Surrogate %Recovery Qualifier Limits Prepared Analyzed D 1-Chirocotane 119 70.130 11/1022 08.48 11/1122 09.30 D Lab Sample ID: LCS 880-39172/2-A Matrix: Solid Analyzes Spike LCS LCS LCS LCS Matrix: Solid Matrix: Solid Prep Type: Tota Analyzes Spike LCS LCS LCS LCS Spike LCS LCS Mink Matrix: Solid Prep Type: Tota Analyzes Spike LCS LCS LCS LCS LCS Matrix: Solid Prep Batch: 38 %Rec Prep Batch: 38 %Rec Prep Type: Tota Prep Batch:	Analysis Batch: 39269											Prep B	atch:	39172
Disest Range Organics (Over CIO-C28) <50.0									_	_				
Cit-C-29 Kit Solution Solution MB MB Surrogate 3/Recovery Qualifier Limits Prepared Analyzed D 1-Chloroctaine 119 70-130 11/10/22 08:48 11/11/22 08:30 11/10/22 08:48 11/11/22 08:30 1-Chloroctaine 119 70-130 11/10/22 08:48 11/11/22 08:30 11/10/22 08:48 11/11/22 08:30 Lab Sample ID: LCS 880-39172/2-A Client Sample ID: Lab Control Sample Type: Total Prep Batch: 31 Analytis Spike LCS LCS %Rec Unit Marke: Analytis Spike LCS LCS mg/Kg 85 70-130 Cifect.28) LCS LCS mg/Kg 85 70-130 Prep Batch: 31 Surrogate %Recovery Qualifier Limits Tot. 130 Prep Batch: 31 Cife.28) LCS LCS Spike LCSD LCSD LCSD LCSD LCSD LCSD Prep Batch: 31 Gradonine Range Organics (Over 1000 1003 11 mg/Kg 95 <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>D</td> <td></td> <td>•</td> <td></td> <td></td> <td>Dil Fac</td>	•								D		•			Dil Fac
MB MB Surrogate %Recovery Qualifier Limits 119 70-130 11/1/022 08:48 11/1/022 08:48 6-Terphenyl 134 S1+ 70-130 11/1/022 08:48 11/1/1/022 08:48 6-Terphenyl 134 S1+ 70-130 11/1/022 08:48 11/1/1/022 08:48 Lab Sample ID: LCS 880-39172/2-A Cilent Sample ID: Lab Control Sample ID: Lab Control Sample ID: CS 06:40 Prep Type: Total Analysis Analysis Added Result Qualifier Unit D %Rec Wite Gasoline Range Organics LCS LCS LCS Since Tor.130 1000 846.7 mg/Kg 85 70-130 C1/C28) LCS LCS LCS Since Since Frep Type: Total Surrogate %Recovery Qualifier Limits Prep Type: Total Prep Type: Total Cilent Sample ID: LCSD 880-39172/3-A Cilent Sample ID: LCSD 880-39172/3-A Prep Type: Total Prep Type: Total Analysis Batch: 39269 Spike LCSD LCSD Spike Recovery Qu		<{	50.0 l	U	50.0		mg	/Kg		11/1	0/22 08:48	11/11/22	09:30	1
Surragate %Recovery Qualifier Limits Propared Analyzed D 1-Chorocodane 119 70-130 11/1022 08:46 11/11/1022 08:30 D Lab Sample ID: LCS 880-39172/2-A Matrix: Solid Spike LCS LCS LCS LCS Baseline Range Organics Prop Type: Tota Client Sample ID: LCS 880-39172/2-A Matrix: Solid Added Result Qualifier Unit D %Recc Prop Type: Tota Client Sample ID: LCS 100 Base Range Organics (Over C10-C28) CCS LCS LCS Matrix: Solid Name Imits 70-130 70-130 70-130 Prop Type: Tota Surrogate %Recovery Qualifier Limits Frep Type: Tota 70-130 Prop Type: Tota 70-130 <td>Oll Range Organics (Over C28-C36</td> <td>6) <t< td=""><td>50.0 l</td><td>U</td><td>50.0</td><td></td><td>mg</td><td>/Kg</td><td></td><td>11/1</td><td>0/22 08:48</td><td>11/11/22</td><td>09:30</td><td>1</td></t<></td>	Oll Range Organics (Over C28-C36	6) <t< td=""><td>50.0 l</td><td>U</td><td>50.0</td><td></td><td>mg</td><td>/Kg</td><td></td><td>11/1</td><td>0/22 08:48</td><td>11/11/22</td><td>09:30</td><td>1</td></t<>	50.0 l	U	50.0		mg	/Kg		11/1	0/22 08:48	11/11/22	09:30	1
1-Chemocodane o-Tarphenyl 119 134 179 134 70.130 11/1/022.08:48 11/1/1/22.08:30 Lab Sample ID: LCS 880-39172/2-A Matrix: Solid Analysis Batch: 39269 Client Sample ID: LCS 100 Prop Type: Tota Prep Type: Tota Since Citical Prep Batch: 33 Analyte Added Result Qualifier Limits GRO/C6-C10 1000 846.7 mg/Kg 85 70.130 Diese Range Organics (CI-C28) ////CES LCS LCS LCS Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Batch: 33 Analyte Matrix: Solid -Tarphenyl 97 70.130 Prep Type: Tota Prep Batch: 35 Surrogate /////WES Matrix: Solid Analysis Batch: 39269 Client Sample ID: Lab Control Sample Prep Batch: 35 Analysis Batch: 39269 Spike LCSD LCSD Negel Range Organics (GRO/C6-C10 Sample Sample Negel Callifier Limits Negel Callifier Prep Type: Tota Prep Batch: 32 LCSD LCSD Surrogate Keevery Qualifier	Surrogata				Limito						ranarad	Analyz	od	Dil Fac
o-Terphenyl 134 51+ 70.130 11/10/22 08:48 11/11/22 09:30 Lab Sample ID: LCS 880-39172/2-A Matrix: Solid Client Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 33 Analysis Batch: 39269 Spike LCS LCS LCS Kree Gasoline Range Organics (Over C10-C28) 1000 845.7 mg/Kg 85 70.130 Surrogate %Recovery Qualifier Limits T0.130 70.130 70.130 Lab Sample ID: LCSD 880-39172/3-A Matrix: Solid LCS LCS LCS Client Sample ID: Lab Control Sample mg/Kg Analysis Batch: 39269 %Recovery Qualifier Limits T0.130 Prep Type: Tota mg/Kg Prep Type: Tota Prep Type: Tota Prep Batch: 30 Analysis Batch: 39269 LCS LCSD LCSD LCSD Prep Type: Tota Prep Batch: 30 Analyte Matrix: Solid Matrix: Solid Prep Type: Tota Prep Batch: 30 Prep Type: Tota Prep Type: Tota Prep Batch: 30 Surrogate %Recovery Qualifier Limits T0.130 Prep Type: Tota Prep Batch: 30 Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid LCSD LCSD LCSD		////////////////////////////////		Quaimer										
Lab Sample ID: LCS 880-39172/2-A Matrix: Solid Analysis Batch: 39269 Analyte Gasoline Range Organics (Over C10-C28) LCS LCS Surrogate Analyte Analyte Surrogate Surro				01+										1
Matrix: Solid Analysis Batch: 39269 Prep Type: Tota Prep Batch: 33 Analysis Batch: 39269 Spike LCS LCS LCS LCS LCS LCS Limits Gaodine Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) 1000 815.5 mg/Kg 82 70-130 82 70-130 LCS LCS LCS LCS Spike Limits 70-130 85 70-130 LCS LCS Limits 70-130 Client Sample ID: Lab Control Sample Prep Batch: 33 70-130 Lab Sample ID: LCSD 880-39172/3-A Analysis Batch: 39269 Kec Limits 70-130 70-130 Lab Sample ID: LCSD 880-39172/3-A Matrix: Solid Analysis Batch: 39269 Spike LCSD LCSD Kec Spike LCSD Spike Client Sample ID: Lab Control Sample Prep Batch: 33 %Rec Locoocc-Co 1000 1003 "1 mg/Kg 95 70-130 21 Locoocc-Co 1000 950.2 mg/Kg 95 70-130 12 Surrogate	o-rerprienyr		134 .	577	70 - 130					11/1	0/22 00.40	11/11/22	09.30	1
Analysis Batch: 39269 Prep Batch: 33 Analyte Added Result Qualifier Unit WRec WRec Gasoline Range Organics 1000 815.5 mg/Kg WRec Limits 82 70-130 - (ROP.O-C-010) Diesel Range Organics WRecovery Qualifier Limits 85 70-130 - (ROP.O-C-010) ECS LCS KRec RPep Batch: 30 VRec VRec Rec VRec VRec VRec Rec VRec KRec ResVRec VRec LCS LCS	Lab Sample ID: LCS 880-3	9172/2-A						Cli	ent	t Sa	mple ID:	Lab Con	trol S	ample
Analysis Batch: 39269 Prep Batch: 33 Analyte Spike LCS LCS LCS LCS LCS Unints 85 70 - 130 - (RO)-C5-C10 Diesel Range Organics (GVer 1000 846.7 mg/Kg 85 70 - 130 - - (RO)-C5-C10 Diesel Range Organics (Over 1000 846.7 mg/Kg 85 70 - 130 - C10-C28) LCS LCS LCS Limits -	Matrix: Solid											Prep Ty	pe: To	tal/NA
Analyte Added Result Qualifier Unit D %Rec Limits Gasoline Range Organics (GRO)-CS-C10 1000 815.5 mg/Kg 82 70.130 62 70.130 Diesel Range Organics (GRO)-CS-C10 LCS LCS Surrogate %Recovery Qualifier Limits 70.130 70.130 70.130 -Terphenyl 97 70.130 70.	Analysis Batch: 39269				Spiko	1.09	1.09					Prep B		
Gasoline Range Organics (GRO)-C2e-C10 Diesel Range Organics (Over C10-C28) LCS LCS LCS LCS LCS Mecovery 94 1000 1000 815.5 mg/Kg 82 70-130 Surrogate 1-Chiorooctane 9-Terphenyi 1000 846.7 mg/Kg 85 70-130 LCS LCS 1-Chiorooctane 9-Terphenyi 1000 846.7 mg/Kg 85 70-130 Lab Sample ID: LCSD 880-39172/3-A Matrix: Solid Analysis Batch: 39269 Spike Added LCSD LCSD LCSD Matrix: Solid Analysis Batch: 39269 Client Sample ID: Lab Control Sample Prep Batch: 33 Surrogate Spike GRO)-C8-C10 Added LCSD 1000 LCSD 1000 LCSD 1000 Spike 95 To-130 21 Surrogate Skecovery 1007 CSD 109 LCSD 70-130 Limits 70-130 12 Chient Sample ID: 890-3402-A-1-G MS Matrix: Solid Analysis Batch: 39269 Sample Sample Sample Matrix Solid Analysis Batch: 39269 Sample Sample Sample Sample Sample 55.1 Site 1 Spike Added MS MS Result Qualifier Unit 97 D %Rec Prep Type: Tota Prep Batch: 33 Matrix: Solid Analysis Batch: 39269 Sample Sample 55.1 Site 97 Added 70.130 Result Qualifier 1007 Unit 97 D	Analyte				•	-		r nit		п	%Rec			
LCS LCSD	-						Quaime							
Desel Range Organics (Over C10-228) 1000 846.7 mg/Kg 85 70 - 130 LCS C10-228) LCS Warcogate Kest (Matrix: Solid Analysis Batch: 39269 Client Sample ID: Lab Control Sample Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Batch: 33 Lab Sample ID: LCSD 8800-39172/3-A Matrix: Solid Gasoline Range Organics (GRO)-C8-C10 Diesel Range Organics (Over C10-228) Spike LCSD LCSD Client Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 33 Lab Sample ID: LCSD 8800-39172/3-A Matrix: Solid Gasoline Range Organics (GRO)-C8-C10 Spike LCSD 1000 CSD 1000 Value 1000 Matrix 1000 Matrix 1000 Matrix 1000 Matrix Prep Batch: 33 Surrogate %Recovery Mecovery 1000 Limits 70 - 130 Limits 70 - 130 Limits Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Type: Tota 1000 Matrix Solid Prep Type: Tota Prep Patch: 33 Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Analyte Sample Result Qualifier Sample Added Prep Type: Tota Prep Type: Tota Prep Type: Tota Prep Patch: 33 Matrix: Sol					1000	010.0		ing/ing			02	10-100		
LCSLCSSurrogate%RecoveryQualifierLimits1-Chlorooctane9470.130o-Terphenyl9770.130Lab Sample ID: LCSD 880-39172/3-A Matrix: SolidClient Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 39269Analysis Batch: 39269SpikeLCSDAnalyteAddedResult 1000Gaoline Range Organics (GRO)-C6-1010001003Ibest Range Organics (Over C10-C28)1000950.2LCSDLCSD 1000LCSDSurrogate%Recovery 1009Qualifier 70.1301-Chlorooctane (GRO)-C6-101000950.2Surrogate 1-Chlorooctane%Recovery 109Qualifier 70.130Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Gasoline Range Organics (GRO)-C6-10Sample Spike Analysis Batch: 39269Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Gasoline Range Organics (GRO)-C6-10Sample Spike Analysis Batch: 39269Sample Range Organics (GRO)-C6-10Simple SpikeSpike MS MSMS MSAnalyte Gasoline Range Organics (Over C10-C28)Solid SpikeQualifier MS MSQualifier MS MSUnit MSD MS MS MSSurrogate%Recovery ValuetifierQualifier MSAdded MSMS MSMS MSMS MSMS MSSurrogate%Recovery ValuetifierMS ValuetifierMS MSMS MSMS MSMS MSJ MS MSD MS MSNS <td>Diesel Range Organics (Over</td> <td></td> <td></td> <td></td> <td>1000</td> <td>846.7</td> <td></td> <td>mg/Kg</td> <td></td> <td></td> <td>85</td> <td>70 - 130</td> <td></td> <td></td>	Diesel Range Organics (Over				1000	846.7		mg/Kg			85	70 - 130		
Surrogate 1-Chiorooctane o-Terphenyl%Recovery 94Qualifier 97Limits 70.130Lab Sample ID: LCSD 880-39172/3-A Matrix: Solid Analysis Batch: 39269Client Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 32Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over - CTerphenylSpike Added 1000LCSD 950.2LCSD mg/KgMait bD %Rec %Rec wind mg/KgPrep Batch: 32 %Rec timitsSurrogate (GRO)-C6-C10 Diesel Range Organics (Over - C10-C28)LCSD %Recovery QualifierLimits TO-130D wind 1000%Rec 950.2Mg/KgD wind mg/KgMg/KgPrep Batch: 32 %Rec 100Surrogate (GRO)-C6-C10 Diesel Range Organics (GRO)-C6-C10 Diesel Range Organics (GRO)-C6-C10 C10-C28)LCSD wind LCSD 109LCSD TO-130Limits TO-130Surrogate (GRO)-C6-C10 Diesel Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C35.1Sample QualifierSpike Added Added Added ResultMS MS MS MSMS MS MS MSMS MS MS MSMS MS MS MS MSMS MS MS MS MS MSMS MS MS MS MS MS MSMS MS MS MS MSMS MS MS MS MSMS MS MS MSMS MS MS MSMS MS MS MS MSMS MS MS MS MSD MS MS MSMS MS MS MS MS MSMS MS MS MS MS MSMS MS MS MS MS MSMS MS MS MS MS MS <td>010 0207</td> <td>105</td> <td>105</td> <td></td>	010 0207	105	105											
1-Chlorooctane 94 70.130 o-Terphenyl 97 70.130 Lab Sample ID: LCSD 880-39172/3-A Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Tota Analyteis Batch: 39269 Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec Gasoline Range Organics (Over C10-C28) LCSD LCSD LCSD LCSD Limits 70.130 12 Surrogate %Recovery Qualifier Limits 70.130 70.130 12 Surrogate %Recovery Qualifier Limits 70.130 70.130 12 Client Sample ID: 890-3402-A-1-G MS Matrix: Solid Client Sample ID: Matrix S Prep Type: Tota Analyte Result Qualifier Limits Prep Type: Tota Gasoline Range Organics (Over 55.1 *1 997 70.130 997 GRO/-C6-C10 Beselt Range Organics (Over <50.0	Surrogate			ifior	l imite									
o-Terphenyl 97 70-130 Lab Sample ID: LCSD 880-39172/3-A Matrix: Solid Analysis Batch: 39269 Client Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 38 Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over 0-Terphenyl Added Result Qualifier Unit mg/Kg D %Rec %Rec Imitis RPD Surrogate 0-Terphenyl %Recovery 109 Qualifier Qualifier Limits TO-130 Prep Type: Tota Prep Batch: 38 Analyte GRO-C6-C10 Diesel Range Organics (Over 0-To-C6-C10 1000 950.2 mg/Kg 95 70-130 21 Surrogate 0-Terphenyl %Recovery 109 Qualifier 70-130 Limits 70-130 Prep Type: Tota Prep Type: Tota mg/Kg Prep Type: Tota Prep Patch: 33			Quun											
Client Sample ID: LCSD 880-39172/3-A Matrix: Solid Analysis Batch: 39269 Spike Added Client Sample ID: Lab Control Sample Prep Type: Tota Prep Batch: 39 Analyte Added Result Qualifier Unit D %Rec Limits RPD Gasoline Range Organics (GRO)-G6-C10 1000 1003 *1 mg/Kg 100 70 - 130 21 Diesel Range Organics (Over C10-C28) LCSD LCSD CSD mg/Kg 95 70 - 130 12 Surrogate %Recovery 9 Qualifier Limits 70 - 130 Client Sample ID: Matrix S Prep Type: Tota Prep Type: Tota Analyte Resourt Qualifier Limits Spike MS Spike NS Spike NS Spike NS Spike NS Spike NS Spike NR Spike NR Spike NR Spike Spike NS Spike NS Spike NS Spike NS Spike Spike NS Spike NS Spike NS Spike NS Spike NS Spike Spike NS														
AnalyteAddedResultQualifierUnitD%RecLimitsRPDGasoline Range Organics (GRO)-C6-C101000100010001003*1mg/KgD%RecLimitsRPDDiesel Range Organics (Over1000950.2mg/Kg9570-13012C10-C28)LCSDLCSDLCSDSurrogate%RecoveryQualifierLimits1-Chlorooctane10770-13070-13070-130121-Chlorooctane10970-13070-130Prep Batch: 35SamplePrep Type: TotaAnalyteSampleSampleSpikeMSMS%RecLimitsAnalyteResultQualifierAddedResultQualifierUnitD%RecGasoline Range Organics55.1*19971007mg/Kg9570-130-Diesel Range Organics (Over<50.0U997861.7mg/Kg8470-130-Diesel Range Organics (Over<50.0U997861.7mg/Kg8470-130-Surrogate%RecoveryQualifierLimits-mg/Kg8470-130-												Prep B		39172
Gasoline Range Organics (GRO)-C6-C10 1000 1003 *1 mg/Kg 100 70 - 130 21 Diesel Range Organics (Over C10-C28) 1000 950.2 mg/Kg 95 70 - 130 12 Surrogate 1-Chioroctane %Recovery 107 Qualifier 107 Limits 70 - 130 Client Sample ID: Matrix S Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Analysis Batch: 39269 Sample Sample Spike Added MS MS Prep Type: Tota Prep Batch: 35 Gasoline Range Organics (GRO)-C6-C10 55.1 *1 997 1007 mg/Kg 9 95 70 - 130 21 MS MS Surrogate Stample Sample Spike MS MS MS Prep Type: Tota Prep Batch: 35 Matrix: Solid Gasoline Range Organics (GRO)-C6-C10 Stample Spike MS MS MS %Rec Limits 70 - 130 %Rec Diseel Range Organics (Over C10-C28) <50.0 U 997 861.7 mg/Kg 84 70 - 130					•	-				_				RPD
(GRO)-C6-C10 Diesel Range Organics (Over 1000 950.2 mg/Kg 95 70 - 130 12 C10-C28) LCSD LCSD LCSD LCSD 1000 950.2 mg/Kg 95 70 - 130 12 Surrogate %Recovery Qualifier Limits 70 - 130 70 - 130 1000 950.2 mg/Kg 95 70 - 130 12 Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Analysis Batch: 39269 Sample Sample Spike MS MS Prep Type: Tota Prep Batch: 35 Gasoline Range Organics (GRO)-C6-C10 S51.1 *1 997 1007 mg/Kg 0 95 70 - 130 Ms MS MS MS MS MS MS 95 70 - 130 - Gasoline Range Organics (Over C10-C28) 55.1 *1 997 997 1007 mg/Kg 0 95 70 - 130 Ms MS MS MS Surrogate 84 70 - 130 -										_ <u>D</u>				Limit
LCSD LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 107 70 - 130 o-Terphenyl 109 70 - 130 Lab Sample ID: 890-3402-A-1-G MS Client Sample ID: Matrix S Matrix: Solid Prep Type: Tota Analysis Batch: 39269 Sample Sample Matrix: Solid Qualifier Added Analyte Result Qualifier Added Gasoline Range Organics 55.1 *1 997 1007 mg/Kg 95 70 - 130 Diesel Range Organics (Over C10 <50.0	(GRO)-C6-C10				1000	1003	*1				100	70 - 130	21	20
Surrogate 1-Chiorooctane o-Terphenyl%Recovery 109Qualifier 109Limits 70 - 130Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Analysis Batch: 39269Client Sample ID: Matrix S Prep Type: Tota Prep Batch: 39Matrix: Solid AnalyteSample ResultSample QualifierSpike *1MS 997MS 1007MS mg/KgD 95%Rec 95Matrix: Solid AnalyteSample QualifierSpike *1MS 997MS 1007MS mg/KgD mg/Kg%Rec 95MS Client Sample Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)MS MSMS MSMS MS70 - 130 MSMS SurrogateMS %RecoveryMS QualifierLimits					1000	950.2		mg/Kg			95	70 - 130	12	20
1-Chlorooctane 107 70 - 130 o-Terphenyl 109 70 - 130 Lab Sample ID: 890-3402-A-1-G MS Client Sample ID: Matrix S Matrix: Solid Prep Type: Tota Analysis Batch: 39269 Sample Spike MS MS Analyte Result Qualifier Added Result Qualifier Unit D %Rec Gasoline Range Organics 55.1 *1 997 1007 mg/Kg D %Rec Limits Diesel Range Organics (Over C10-C28) MS MS MS MS 84 70 - 130 MS MS MS Surrogate %Recovery Qualifier Limits MS		LCSD	LCSE)										
o-Terphenyl 109 70 - 130 Lab Sample ID: 890-3402-A-1-G MS Matrix: Solid Analysis Batch: 39269 Client Sample ID: Matrix S Prep Type: Tota Prep Batch: 39 Analyte Sample Sample Spike MS Ms <td>Surrogate</td> <td>%Recovery</td> <td>Quali</td> <td>ifier</td> <td>Limits</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Surrogate	%Recovery	Quali	ifier	Limits									
Lab Sample ID: 890-3402-A-1-G MS Client Sample ID: Matrix S Matrix: Solid Prep Type: Tota Analysis Batch: 39269 Prep Batch: 39 Karalyte Result Qualifier Added Result Qualifier Unit D %Rec Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits	1-Chlorooctane	107			70 - 130									
Matrix: Solid Analysis Batch: 39269 Prep Type: Total Prep Batch: 39 Analysis Batch: 39269 Sample Sample Spike MS MS Prep Batch: 39 Prep Batch: 39 Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits — — — Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) <50.0	o-Terphenyl	109			70 - 130									
Matrix: Solid Analysis Batch: 39269 Prep Type: Total Prep Batch: 39 Analysis Batch: 39269 Sample Sample Spike MS MS Prep Batch: 39 Prep Batch: 39 Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits — — — Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) <50.0	Lab Sample ID: 890-3402-4	A-1-G MS								C	lient San	nple ID: I	Matrix	Spike
SampleSampleSpikeMSMS%RecAnalyteResultQualifierAddedResultQualifierUnitD%RecLimitsGasoline Range Organics55.1*19971007mg/Kg9570 - 130(GRO)-C6-C10Dissel Range Organics (Over C10-C28)<50.0														
AnalyteResultQualifierAddedResultQualifierUnitD%RecLimitsGasoline Range Organics55.1*199710071007mg/Kg9570 - 130(GRO)-C6-C10Diesel Range Organics (Over C10-C28)<50.0	Analysis Batch: 39269	0	0		Omilier		мо						atch:	391/2
Gasoline Range Organics 55.1 *1 997 1007 mg/Kg 95 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0	Ameliate	•	-		•			. 11-14		_	0/ D = -			
(GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 861.7 mg/Kg 84 70 - 130 C10-C28) MS MS Surrogate %Recovery Qualifier Limits				itier			Qualifie			_ D				
C10-C28) MS MS Surrogate %Recovery Qualifier Limits	(GRO)-C6-C10													
Surrogate %Recovery Qualifier Limits		<50.0	U		997	861.7		mg/Kg			84	70 - 130		
Surrogate %Recovery Qualifier Limits														
		MC	MS											
	Surrogate			ifier	l imits									

Job ID: 890-3405-1 SDG: 03E1558068

Eurofins Carlsbad

79

o-Terphenyl

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3405-1 SDG: 03E1558068

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

Matrix: Solid Analysis Batch: 39269	-A-1-H MSD					Silent 3	amp	ער אין. וע			al/NA
	Sample	•	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limi
Gasoline Range Organics (GRO)-C6-C10	55.1	*1	999	978.6		mg/Kg		92	70 - 130	3	20
Diesel Range Organics (Over C10-C28)	<50.0	U	999	796.8		mg/Kg		77	70 - 130	8	2
• · · ·	MSD										
Surrogate	%Recovery	Qualifier	Limits	-							
1-Chlorooctane	82		70 - 130								
o-Terphenyl	73		70 - 130								
lethod: 300.0 - Anion		omatogra	pny								
Lab Sample ID: MB 880-3 Matrix: Solid	9126/1-A						Clie	ent Sam	nple ID: M Prep T	lethod ype: So	
Analysis Batch: 39335		MB MB									
Analyte	Re	sult Qualifier	,	RL	Unit	D	Р	repared	Analy	zed	Dil Fa
Chloride	<	5.00 U		5.00	mg/K			•	11/12/22		
Matrix: Solid Analysis Batch: 39335										ype: So	
			Spike	-	LCS				%Rec		
Analyte			Added	Result	LCS Qualifier	Unit	D	%Rec	Limits		
Analyte			•	-		Unit mg/Kg	D	%Rec			
Analyte Chloride Lab Sample ID: LCSD 880	0-39126/3-A		Added	Result	Qualifier	mg/Kg		106	Limits 90 - 110	Sample	
Analyte Chloride Lab Sample ID: LCSD 88(Matrix: Solid	0-39126/3-A		Added 250	Result 266.1	Qualifier	mg/Kg		106	Limits 90 - 110 D Control Prep T		olubl
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335	0-39126/3-A		Added 250 Spike	Result 266.1 LCSD	Qualifier C	mg/Kg Client Sar	nple	106	Limits 90 - 110 Control Prep T %Rec	ype: So	olubl RP
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte	0-39126/3-A		Added 250	Result 266.1 LCSD	Qualifier	mg/Kg		106	Limits 90 - 110 D Control Prep T		RP Lim
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402			Added 250 Spike Added	Result 266.1 LCSD Result	Qualifier C	mg/Kg Client Sar Unit	nple	106 ID: Lab <u>%Rec</u> 104	Limits 90-110 D Control Prep T %Rec Limits 90-110 mple ID:	ype: So RPD 3 Matrix 3	RP Lim Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid			Added 250 Spike Added	Result 266.1 LCSD Result	Qualifier C	mg/Kg Client Sar Unit	nple	106 ID: Lab <u>%Rec</u> 104	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110	ype: So RPD 3 Matrix 3	RP Lim 2 Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid			Added 250 Spike Added	CSD Result 258.9	Qualifier C	mg/Kg Client Sar Unit	nple	106 ID: Lab <u>%Rec</u> 104	Limits 90-110 D Control Prep T %Rec Limits 90-110 mple ID:	ype: So RPD 3 Matrix 3	RP Lim 2 Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analysis Batch: 39335	 -A-1-D MS Sample	Sample Qualifier	Added 250 Spike Added 250	Result 266.1 LCSD Result 258.9	Qualifier C LCSD Qualifier	mg/Kg Client Sar Unit	nple	106 ID: Lab <u>%Rec</u> 104	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110 mple ID: Prep T	ype: So RPD 3 Matrix 3	RP Lim 2 Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte	 -A-1-D MS Sample		Added 250 Spike Added 250 Spike	Result 266.1 LCSD Result 258.9	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple _ D CI	106 ID: Lab <u>%Rec</u> 104	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec	ype: So RPD 3 Matrix 3	RP Lim 2 Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402	-A-1-D MS Sample Result 195		Added 250 Spike Added 250 Spike Added	Result 266.1 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple _ D Cl	106 ID: Lab <u>%Rec</u> 104 iient Sa <u>%Rec</u> 109	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spi	Ppe: So RPD 3 Matrix ype: So	Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid	-A-1-D MS Sample Result 195		Added 250 Spike Added 250 Spike Added	Result 266.1 LCSD Result 258.9 MS Result	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple _ D Cl	106 ID: Lab <u>%Rec</u> 104 iient Sa <u>%Rec</u> 109	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spi	ype: So RPD 3 Matrix ype: So ke Dup	Spik
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid Analyte Chloride Lab Sample ID: 890-3402- Matrix: Solid	-A-1-D MS Sample Result 195	Qualifier	Added 250 Spike Added 250 Spike Added	Result 266.1 LCSD Result 258.9 MS Result 466.5	Qualifier LCSD Qualifier MS	mg/Kg Client Sar Unit mg/Kg	nple _ D Cl	106 ID: Lab <u>%Rec</u> 104 iient Sa <u>%Rec</u> 109	Limits 90 - 110 D Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spi	ype: So RPD 3 Matrix ype: So ke Dup	Spik Lim 2 Spik Dubl
Analyte Chloride Lab Sample ID: LCSD 880 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte Chloride Lab Sample ID: 890-3402 Matrix: Solid Analysis Batch: 39335 Analyte	-A-1-D MS Sample Result 195 -A-1-E MSD Sample	Qualifier	Added 250 Spike Added 250 Spike Added 249	Result 266.1 LCSD Result 258.9 MS Result 466.5	Qualifier LCSD Qualifier MS Qualifier	mg/Kg Client Sar Unit mg/Kg	nple _ D Cl	106 ID: Lab <u>%Rec</u> 104 iient Sa <u>%Rec</u> 109	Limits 90 - 110 O Control Prep T %Rec Limits 90 - 110 mple ID: Prep T %Rec Limits 90 - 110 Matrix Spi Prep T	ype: So RPD 3 Matrix ype: So ke Dup	RP 2 Spik blubl

Page 169 of 192

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3405-1 SDG: 03E1558068

GC VOA

Prep Batch: 39022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-39022/5-A	Method Blank	Total/NA	Solid	5035	
rep Batch: 39138					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3405-1	SS07	Total/NA	Solid	5035	
MB 880-39138/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39138/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39138/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3392-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-3392-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	
Lab Sample ID 890-3405-1	Client Sample ID	Prep Type Total/NA	Matrix	Method 8021B	Prep Batch 39138
Lab Sample ID	•				
		Totol/NIA		00040	
	Method Blank	Total/NA	Solid	8021B	39022
MB 880-39138/5-A	Method Blank	Total/NA	Solid	8021B	39138
MB 880-39138/5-A LCS 880-39138/1-A	Method Blank Lab Control Sample	Total/NA Total/NA	Solid Solid	8021B 8021B	39138 39138
MB 880-39022/5-A MB 880-39138/5-A LCS 880-39138/1-A LCSD 880-39138/2-A	Method Blank Lab Control Sample Lab Control Sample Dup	Total/NA Total/NA Total/NA	Solid Solid Solid	8021B 8021B 8021B	39138 39138 39138
MB 880-39138/5-A LCS 880-39138/1-A LCSD 880-39138/2-A 890-3392-A-1-C MS	Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B	39138 39138 39138 39138 39138
MB 880-39138/5-A LCS 880-39138/1-A LCSD 880-39138/2-A 890-3392-A-1-C MS	Method Blank Lab Control Sample Lab Control Sample Dup	Total/NA Total/NA Total/NA	Solid Solid Solid	8021B 8021B 8021B	39138 39138 39138
MB 880-39138/5-A LCS 880-39138/1-A LCSD 880-39138/2-A	Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B	39138 39138 39138 39138 39138
MB 880-39138/5-A LCS 880-39138/1-A LCSD 880-39138/2-A 890-3392-A-1-C MS 890-3392-A-1-D MSD	Method Blank Lab Control Sample Lab Control Sample Dup Matrix Spike Matrix Spike Duplicate	Total/NA Total/NA Total/NA Total/NA	Solid Solid Solid Solid	8021B 8021B 8021B 8021B 8021B	39138 39138 39138 39138 39138

GC Semi VOA

Prep Batch: 39172

Lab Sample ID 890-3405-1	Client Sample ID SS07	Prep Type Total/NA	Matrix Solid	Method Prep B 8015NM Prep	Batch
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3405-1	SS07	Total/NA	Solid	8015B NM	39172
MB 880-39172/1-A	Method Blank	Total/NA	Solid	8015B NM	39172
LCS 880-39172/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39172
LCSD 880-39172/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39172
890-3402-A-1-G MS	Matrix Spike	Total/NA	Solid	8015B NM	39172
890-3402-A-1-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39172
Analysis Batch: 394	01				
Г <u>а</u> <u>.</u>					

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3405-1	SS07	Total/NA	Solid	8015 NM	

Page 170 of 192

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QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 125H

HPLC/IC

Leach Batch: 39126

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3405-1	SS07	Soluble	Solid	DI Leach	
MB 880-39126/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3405-1	SS07	Soluble	Solid	300.0	39126
MB 880-39126/1-A	Method Blank	Soluble	Solid	300.0	39126
LCS 880-39126/2-A	Lab Control Sample	Soluble	Solid	300.0	39126
LCSD 880-39126/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39126
890-3402-A-1-D MS	Matrix Spike	Soluble	Solid	300.0	39126
890-3402-A-1-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39126

Job ID: 890-3405-1 SDG: 03E1558068

Dil

1

1

1

1

1

Factor

Run

Client: Ensolum Project/Site: PLU 21 BD 125H

Client Sample ID: SS07 Date Collected: 11/07/22 12:10 Date Received: 11/07/22 14:17

Batch

Туре

Prep

Analysis

Analysis

Analysis

Analysis

Analysis

Leach

Prep

Batch

5035

8021B

Total BTEX

8015NM Prep

8015 NM

8015B NM

DI Leach

300.0

Method

Job ID: 890-3405-1 SDG: 03E1558068

Lab Sample ID: 890-3405-1

Matrix: Solid

Initial	Final	Batch	Prepared			
Amount	Amount	Number	or Analyzed	Analyst	Lab	5
5.02 g	5 mL	39138	11/09/22 15:29	MNR	EET MID	
5 mL	5 mL	39343	11/12/22 17:37	MNR	EET MID	6
		39481	11/14/22 12:31	SM	EET MID	
		39401	11/14/22 09:30	SM	EET MID	
10.01 g	10 mL	39172	11/10/22 08:48	DM	EET MID	0
1 uL	1 uL	39269	11/11/22 15:50	SM	EET MID	0
4.97 g	50 mL	39126	11/09/22 15:04	KS	EET MID	9
0 mL	1.0 mL	39335	11/12/22 03:35	СН	EET MID	
						10
(432)704-544	0					11

Laboratory References:

Prep Type

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Total/NA

Soluble

Soluble

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 Project/Site: PLU 21 BD 125H

Laboratory: Eurofins Midland

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

Authority Texas		ogram	Identification Number	Expiration Date	
		LAP	T104704400-22-24	06-30-23	
T I (11					
the agency does not c		rt, but the laboratory is r	not certified by the governing authority.	This list may include analytes for whic	
0,		rt, but the laboratory is r Matrix	ot certified by the governing authority. Analyte	I his list may include analytes for whic	
the agency does not o	offer certification.		, , , , , ,	I his list may include analytes for whic	

Eurofins Carlsbad

Page 173 of 192

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 125H Job ID: 890-3405-1 SDG: 03E1558068

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

Page 175 of 192

Client: Ensolum Project/Site: PLU 21 BD 125H

Job ID: 890-3405-1
SDG: 03E1558068

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3405-1	SS07	Solid	11/07/22 12:10	11/07/22 14:17	0.2'

atterned :	Relinquished by: (Signature)	Notice: Signature of this docu of service. Eurofins Xenco wil of Eurofins Xenco. A minimur	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed					F607	Sample Identification	Total Containers:	Sample Custody Seals:	Cooler Custody Seals:	Samples Received Intact:	SAMPLE RECEIPT	PO #	Sampler's Name:	Project Location:	Project Number:	Project Name:		City, State ZIP: Mid			Project Manager: Kale			euronns
Ø	gnature)	ment and relinquishmer I be llable only for the c n charge of \$85.00 will t	200.8 / 6020: letal(s) to be anal					S	ation Matrix		Yes No WA	Yes No NIA	Yes No	Jemp Blank:		Julianna Falcomata	32.10974103.88422	03E1558068	PLU 21 BD 125H	817-683-2503	Midland, TX 79701	601 N. Marienfeld Street, Suite 400	Ensolum, LLC	Kalei Jennings		Xenco	
man	Received b	it of samples constitutes of samples and shoes and shoes and shoes and shoes and shoes applied to each pro-	œ					11-7-22 1	Date Sampled	Corrected Temperature:	-		ometer	(Kes) NO V					25H			eet, Suite 400					Environment Testing
	Received by: (Signature)	ites a valid purchase order nall not assume any respoi ject and a charge of \$5 for	8RCRA 13PPM Tex TCLP / SPLP 6010:					1210 .2' (Time Depth G Sampled Cepth Ce	perature: 5.X	-		Dowm I	Wet Ice: (Yes) No	the lab, if received by 4:30pm	TAT starts the day received by	Due Date:	Routine 🗌 Rush	Turn Around	Email: kjennings@	City, State ZIP:	Address:	Company Name	Bill to: (if different)			
11-7-22 14	Date/Time	from client company to Eurofi sibility for any losses or experience of sample submitted to Europe	Texas 11 Al Sb As Ba I 110: 8RCRA Sb As Ba E						Comp Cont BTEX TPH		1	Ľ	I		-	by		Code		Email: kjennings@ensolum.com, bbelill@ensolum.com	IP: Carlsbad, NM 88220	3104 E. Greene Street	ame: XTO Energy, Inc	erent) Garret Green	Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296	Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300 Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334
✓ 4 0	Relinquished by: (Signa	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 \$65.00 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 negotiat	RCRA 13PPM Texas 11 AI Sb As Ba Be B Cd Ca Cr Co Cu Fe I TCLP/SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo					×			890-3405 0								ANALYSIS RE	ensolum.com	38220	e Street	ĩć		arlsbad, NM (575) 988-3199	ubbock, TX (806) 794-1296	Dallas, TX (214) 902-0300 n Antonio, TX (210) 509-3334
	gnature) Received by: (Signature)	ctors. It assigns standard terms and conditions ses are due to circumstances beyond the control terms will be enforced unless previously negotiated.	re Pb Mg Mn Mo Ni K Se Ag Mo Ni Se Ag Ti U Hg:								Chain of Custody								REQUEST	Deliverables: EDD	Reporting: Level III Level III PST/UST L TRRP	State of Project: NM		Work	www.xenco.com		Work Order No:
	lignature)	ions introl gotiated.	SiO ₂ Na Sr TI Sn 1631 / 245.1 / 7470 /			nAPP2	Cost Cent		Sample	Nach+Ascoldic Acid. SAFC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSO4: NABIS	H3PO4: HP	H ₂ SO ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Preserv	ADaPT U Other			Brownfields RC	Work Order Comments	o.com Page		er No:
	Date/Time		U V Zn 7471			nAPP2214547737	Cost Center: 1666421001		Sample Comments	ACIO. SAFC	Acid: CADC	-			NaOH: Na	HNO3: HN	MeOH: Me	DI Water: H ₂ O	Preservative Codes						L of L		

Job Number: 890-3405-1 SDG Number: 03E1558068

List Source: Eurofins Carlsbad

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3405 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is	N/A	

Job Number: 890-3405-1 SDG Number: 03E1558068

List Source: Eurofins Midland

List Creation: 11/09/22 10:47 AM

Login Sample Receipt Checklist

Client: Ensolum

<6mm (1/4").

Login Number: 3405 List Number: 2 Creator: Rodriguez, Letic

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	

Eurofins Carlsbad Released to Imaging: 2/22/2023 2:12:01 PM Received by OCD: 11/30/2022 7:27:20 AM

Eurofins Carlsbad

Job Notes

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

Authorization

RAMER

Generated 11/23/2022 9:17:53 AM Revision 1

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

Eurofins Carlsbad is a laboratory within Eurofins Environment Testing South Central, LLC, a company within Eurofins Environment Testing Group of Companies



APPENDIX E

NMOCD Notifications
From:	Tacoma Morrissey
To:	garrett.green@exxonmobil.com; Collins, Melanie
Cc:	DelawareSpills@exxonmobil.com; Ashley Ager; Ben Belill; Kalei Jennings; Stuart Hyde
Subject:	RE: XTO - Sampling Notification (Week of 10/17/22 - 10/21/22)
Date:	Sunday, October 16, 2022 10:30:26 AM
Attachments:	image001.png image002.png image003.png image004.png

Hi Garrett,

Please see the below email for NMOCD sampling notification for the week of Oct 17, 2022, if you would like to provide an update.

All,

XTO plans to complete final sampling activities at the following sites the week of Oct 17, 2022.

Monday

• BEU 29W Vader 100H / nAPP2102831345

Tuesday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 21 BD 125H/ nAPP2214547737

Wednesday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 30 Big Sinks/ nAPP2209137379, nAPP2208351954, nAPP2206853301

Thursday

- PLU 30 Big Sinks/ nAPP2209137379, nAPP2208351954, nAPP2206853301
- JRU 108 / nAPP2217931599
- JRU 106 / nAPP2212344322

Thank you!



Tacoma Morrissey Senior Geologist 337-257-8307 Ensolum, LLC in f

Kalei Jennings

From: Sent:	Green, Garrett J <garrett.green@exxonmobil.com> Friday, September 30, 2022 1:59 PM</garrett.green@exxonmobil.com>
To:	ocd.enviro@emnrd.nm.gov; Harimon, Jocelyn, EMNRD; Hamlet, Robert, EMNRD; Bratcher, Michael,
	EMNRD; Nobui, Jennifer, EMNRD
Cc:	DelawareSpills /SM; Tacoma Morrissey
Subject:	XTO - Sampling Notification (Week of 10/03/22 - 10/07/22)

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of Oct 3, 2022.

Monday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 25 Brushy Draw Satellite / nAPP2219648561

Tuesday

- BEU 29W Vader 100H / nAPP2102831345
- ADU 624 / NAPP2123634554
- ADU 641/ NAPP2215449179

Wednesday

- BEU 29W Vader 100H / nAPP2102831345
- ADU 624 / NAPP2123634554
- ADU 641/ NAPP2215449179
- PLU 21 BD 125, 126, 905 / nAPP2215147527, nAPP2214547737, nAPP2214342255

Thursday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 21 BD 125, 126, 905 / nAPP2215147527, nAPP2214547737, nAPP2214342255
- PLU 78 SWD / NAPP2126639352

Friday

- BEU 29W Vader 100H / nAPP2102831345
- PLU 78 SWD / NAPP2126639352

Thanks,

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



APPENDIX F

SDS for Friction Reducer

Released to Imaging: 2/22/2023 2:12:01 PM

Issuing Date 01-Aug-2019	Revision Date 01-Aug-2019	Revision Number
1. IDENTIFIC	ATION OF THE SUBSTANCE/PREPARA COMPANY/UNDERTAKING	ATION AND OF THE
Product identifier		
Product Name	POLYglide Xcel-200	
Other means of identification		
Product Code(s)	10497	
Synonyms	None	
Recommended use of the cher	nical and restrictions on use	
ecommended Use No information available		
Jses advised against	No information available	
Details of the supplier of the sa	fety data sheet	
Supplier Address PfP Industries 29738 Goynes Rd. Katy, TX 77493	Manufacturer Address PfP Industries 29738 Goynes Rd. Katy, TX 77493	
Emergency telephone number		
Company Phone Number	281-371-2000	
Emergency Telephone	Chemtrec 1-800-424-9300	
	2. HAZARDS IDENTIFICATION	1
Classification	rdous by the 2012 OSHA Hazard Communication Stand	1ard (29 CER 1910 1200)
Flammable liquids		Category 4

Label elements

Warning Combustible liquid

EN / AGHS

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	1

*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 effect	cts, both acute and delayed	
Symptoms	No information available.	
Indication of any immediate medica	l attention and special treatment needed	
Note to physicians	Treat symptomatically.	

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 Impac	st 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 e	guipment 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 containm	ent and cleaning up
Methods for containment	Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike fa 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, includ	ing 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.

Revision Date 01-Aug-2019

8. EXP	OSURE 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, su	ich 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 no 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

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 pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.97 - 1.03	
Nater solubility	Miscible in water	
Solubility in other solvents	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition 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	

Revision Date 01-Aug-2019

Other Information	
Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available
and state and a state of the	

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.
	and Reading the second concernence of the second

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.

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 degrada	ability No informati	on available.		
Bioaccumulation	There is no	data for this product.		
Other adverse effects	No informati	ion available.		
	13. DIS	POSAL CONSIDERA	TIONS	
Waste treatment method	ls			
Waste from residues/un products		n accordance with local regul tal legislation.	ations. Dispose of was	te in accordance with
Contaminated packaging	g Do not reus	e empty containers.		
	14. TR	ANSPORT INFORMA	TION	
DOT	Not regulate	ed. Product does not sustain o	combustion (49 CFR 1	73.120(b)(3))
	15. RE	GULATORY INFORM	ATION	
International Inventories	6			
TSCA	Complies			
DSL/NDSL	Complies			
EINECS/ELINCS	Complies			
ENCS	Does not co	mply		
IECSC	Complies			
KECL	Complies			
EN / AGHS				Page 6/

Revision Date 01-Aug-2019

Page 190 of 192

10497 - POLYglide Xcel-200

Revision Date 0	1-Aug-2019
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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.

3	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

Revision Date 01-Aug-2019

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-2	019		
Revision Date	01-Aug-2	019		
Revision Note	No inform	nation 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

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

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

District III

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

District IV 1220 S. St Francis Dr., Santa Fe, NM 87505 Phone: (505) 476-3470 Fax: (505) 476-3462

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

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	162392
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rhamlet	We have received your closure report and final C-141 for Incident #NAPP2214547737 PLU 21 BRUSHY DRAW 125H, thank you. This closure is approved. Please be aware that any contaminants left on pad above reclamation standards will need to be addressed at the time the site/facility is plugged and abandoned.	2/22/2023

Action 162392