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

NAPP2210942764 Incident ID 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.

Photographs of the remediated site prior to backfill or photos of the liner integrity if applicable (Note: appropriate OCD District office must be notified 2 days prior to liner inspection) Laboratory analyses of final sampling (Note: appropriate ODC District office must be notified 2 days prior to final sampling) Description of remediation activities I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete. Printed Name: _Garrett Green	A scaled site and sampling diagram as described in 19.15.29.11 N	NMAC
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email:garrett.green@exxonmobil.com Telephone:575-200-0729	Printed Name: _Garrett Green Tit	tle: _Environmental Coordinator
OCD Only Jocelyn Harimon Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and	Signature: D	Date: 9/21/2022
Jocelyn Harimon Received by: Date: Closure approval by the OCD does not relieve the responsible party of liability should their operations have failed to adequately investigate and	email:garrett.green@exxonmobil.com Te	elephone:575-200-0729
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	Received by:	
remediate contamination that poses a threat to groundwater, surface water, human health, or the environment nor does not relieve the responsible party of compliance with any other federal, state, or local laws and/or regulations.	remediate contamination that poses a threat to groundwater, surface wat	ter, human health, or the environment nor does not relieve the responsible
Closure Approved by: Robert Hamlet Date: 12/13/2022	Closure Approved by: Robert Hamlet	Date: <u>12/13/2022</u>
Printed Name: Robert Hamlet Title: Environmental Specialist - Advanced		

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

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	NAPP2210942764
District RP	
Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible Party XTO Energy					5380	
Contact Name Adrian Baker				Contact Te	elephone 432-236-3808	
Contact ema	^{il} adrian.bak	er@exxonmobil.co	om	Incident #	(assigned by OCD)	
		6401 Holiday Hill		nd, Texas, 79707		
			Location	of Release So	ource	
Latitude 32	.10990			Longitude	-103.88862	
			(NAD 83 in dec	cimal degrees to 5 decim	nal places)	
Site Name P	LU 21 Brusl	hy Draw 104H		Site Type	Production Well	
Date Release	Discovered	04/05/2022		API# (if app	licable)	
	T		_	1		
Unit Letter	Section	Township	Range	Coun	ty	
N	21	25S	30E	Eddy	y	
Surface Owner	r: State	☐ Federal ☐ Tr	ibal 🗷 Private ()	Name: Janey Paso	chal)	
	Surface Owner: State Federal Tribal Private (Name:					
			Nature and	d Volume of F	Release	
	Materia	l(s) Released (Select al	l that apply and attach	calculations or specific	justification for the volumes provided below)	
Crude Oil	1	Volume Release	d (bbls)		Volume Recovered (bbls)	
Produced Water Volume Released (bbls)			Volume Recovered (bbls)			
Is the concentration of total dissolved so in the produced water >10,000 mg/l?			☐ Yes ☐ No			
Condensate Volume Released (bbls)		3/1:	Volume Recovered (bbls)			
Natural Gas Volume Released (Mcf)			Volume Recovered (Mcf)			
Volume/Weight Released (provide units		e units)	Volume/Weight Recovered (provide units)			
Produced wat	er w/ FR	41.15 BBLS			35.00 BBLS	
Cause of Rel	ease Commi	inication and now	er loss caused the	spill-over tank to o	verflow, releasing fluids both to containment and to pad.	
	Free flu	ids were recovered	d. A third-party c	contractor has been i	retained for remediation purposes.	

Received by OCD: 9/21/2022 2:44:22 PMI State of New Mexico
Page 2 Oil Conservation Division

Marke of New Mexico

Incident ID	NAPP2210942764
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Facility ID	
Application ID	

Was this a major releases? releases as defined by 19.15.29.7(A) NMAC? Yes No					
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Adrian Baker to Mike Bratcher, Robert Hamlet, ocdonline, EMNRD on Wednesday, April 6, 2022 at 1:43 PM via email. Initial Response The responsible pures wast undertake the following actions invandantly unders they could create a safety hazard that would result in injury The impacted area has been secured to protect human health and the environment. Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. All free liquids and recoverable materials have been removed and managed appropriately. If all the actions described above have not been undertaken, explain why: NA Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a marrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment are (see 19.15.29.11/A(5)/s) a NMAC, please attach all information needed for cleases occurred within a lined containment are (see 19.15.29.11/A(5)/s) a NMAC. please attach all information needed for clease occurred within a fined containment are case 19.15.29.11/A(5)/s) a NMAC. please attach all information needed for clease when the averaged public health or the environment. The acceptance of a C-14 report to the other of the public health or the environment may are disconsistent of the public health or the environment. The acceptance of a C-14 report does not relieve the operators of responsibility for complained with any other federal, state, or beal have and/or regulations. Printed Name: Shelby Pennington Title: Environmental Manager Date: 1		If YES, for what reason(s) does the respon	sible party consider this a major release?		
If YES, was immediate notice given to the OCD? By whom? To whom? When and by what means (phone, email, etc)? Yes, by Adrian Baker to Mike Bratcher, Robert Hamlet, ocdonline, EMNRD on Wednesday, April 6, 2022 at 1:43 PM via email. Initial Response Initial Response The responsible party must ondertake the following actions isomodiately unless they could create a safety hazard that would result in injury In the source of the refense has been secured to protect human health and the environment. Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices. All free liquids and recoverable materials have been removed and managed appropriately. If all the actions described above have not been undertaken, explain why: NA Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. I bereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulation allowed protectors are required to report and/or fle certain release notifications and perform corrective actions for release which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. Printed Name: Shelby Pennington Tide: Environmental Manager Jate: 4/19/22 Date: 1 4/19/22		A release equal to or greater than 25 barrel	S.		
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Section In the actions described above have not been undertaken, explain why:	Released materials h	ave been contained via the use of berms or d	ikes, absorbent pads, or other containment devices.		
If all the actions described above have not been undertaken, explain why: NA Per 19.15.29.8 B. (4) NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please attach a narrative of actions to date. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see 19.15.29.11(A)(5)(a) NMAC), please attach all information needed for closure evaluation. I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report 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: Shelby Pennington Title: Environmental Manager Title: Environmental Manager Telephone: 281-723-9353 OCD Only					
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email: shelby.g.pennington@exxonmobil.com Telephone: 281-723-9353 OCD Only	/.				
OCD Only	Signature:	temfo	Date: 4/19/22		
OCD Only	shelby.g.penningt	ton@exxonmobil.com	Telephone: 281-723-9353		
			1 displication		
Received how Joselyn Harimon Date: 04/19/2022	OCD Only				
Received by: 300-bytt Haithon Date: 04/13/2022	Received by: Jocelyn	n Harimon	Date: 04/19/2022		

Location:	PLU 21 Brushy Draw 104H		
Spill Date:	4/5/2022		
	Area 1		
Approximate A	rea =	1000.00	sq. ft.
Average Satura	tion (or depth) of spill =	3.00	inches
Average Porosit	y Factor =	0.03	
	VOLUME OF LEAK		
Total Crude Oil		0.00	bbls
Total Produced		21.34	
	Area 2		
Approximate A	3600.00	sq. ft.	
		inches	
Average Porosity Factor = 0.03			
	VOLUME OF LEAK		
		0.00	bbls
Total Produced Water = 4		4.81	bbls
	Area 3 - containment		
Approximate A		84.22	cu.ft.
	VOLUME OF LEAK	1	
Total Crude Oil	=	0.00	bbls
Total Produced Water =		15.00	bbls
	TOTAL VOLUME OF LEAK		
Total Crude Oil	=	0.00	bbls
Total Produced	Total Produced Water = 41.15 b		bbls
	TOTAL VOLUME RECOVERED		
Total Crude Oil			bbls
Total Produced Water =		35.00	bbls

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

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

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

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

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

CONDITIONS

Action 99756

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	99756
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By		Condition Date
jharimon	None	4/19/2022

e of New Mexico

Incident ID	NAPP2210942764
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?		
Are the lateral extents of the release overlying an unstable area such as karst geology?		
Are the lateral extents of the release within a 100-year floodplain?		
Did the release impact areas not on an exploration, development, production, or storage site?		
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 well	ls.	
☐ Data table of soil contaminant concentration data		
 ☑ Depth to water determination ☑ Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release 		
Boring or excavation logs		
Photographs including date and GIS information		
☐ Topographic/Aerial maps		
☐ Laboratory data including chain of custody		

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

Received by OCD: 9/21/2022 2:44:22 PM Form C-141 State of New Mexico Page 4 Oil Conservation Division Incident ID NAPP2210942764
District RP
Facility ID
Application ID

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Printed Name: _Garrett Green	Title: _Environmental Coordinator	
Signature: Satt Sur	Date: 9/21/2022	
email: _garrett.green@exxonmobil.com	Telephone:575-200-0729	
OCD Only		
Received by: Jocelyn Harimon	Date: 09/22/2022	

tate of New Mexico Page 8 of 232

Incident ID	NAPP2210942764
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29.1	1 NMAC
Photographs of the remediated site prior to backfill or photos must be notified 2 days prior to liner inspection)	of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC	C District office must be notified 2 days prior to final sampling)
□ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and remuman health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regular restore, reclaim, and re-vegetate the impacted surface area to the conformation accordance with 19.15.29.13 NMAC including notification to the OPrinted Name: _Garrett Green	nediate contamination that pose a threat to groundwater, surface water, a C-141 report does not relieve the operator of responsibility for tions. The responsible party acknowledges they must substantially neditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete. Title: _Environmental Coordinator
OCD Only Jocelyn Harimon Received by:	09/22/2022 Date:
	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:	Date:
Printed Name:	Title:



September 21, 2022

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

Re: Closure Request

PLU 21 Brushy Draw 104H Incident Number NAPP2210942764

Eddy County, New Mexico

To Whom It May Concern:

Ensolum, LLC (Ensolum), on behalf of XTO Energy, Inc. (XTO), has prepared this Closure Request to document site assessment, excavation, and soil sampling activities at the PLU 21 Brushy Draw 104H (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. Based on field observations, field screening activities, and soil sample laboratory analytical results, XTO is submitting this Closure Request, describing site assessment, excavation, and delineation activities that have occurred and requesting no further action for Incident Number NAPP2210942764.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit N, Section 21, Township 25 South, Range 30 East, in Eddy County, New Mexico (32.10990° N, 103.88862° W) and is associated with oil and gas exploration and production operations on private surface land owned by Ms. Janey Paschal.

On April 5, 2022, a communication and power loss during operations resulted in the release of approximately 41.15 barrels (bbls) of produced water with friction reducer (FR) from the spill-over tank into secondary containment and onto the Site pad. A vacuum truck was immediately dispatched to the Site to recover free-standing fluids; approximately 35.0 bbls were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) via email on April 6, 2022 and submitted a Release Notification Form C-141 (Form C-141) on April 19, 2022. The release was assigned Incident Number NAPP2210942764.

The temporary liner was removed prior to beginning site assessment activities. As such, a liner inspection could not be completed. The release extent was identified based on information provided on the Form C-141 and visual observations.

SITE CHARACTERIZATION AND CLOSURE CRITERIA

The Site was characterized according to Site Assessment/Characterization, of Title 19, Chapter 15, Part 29, Section 12 (19.15.29.12) of the New Mexico Administrative Code (NMAC). Results from the

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 601 North Marienfield #400 | Midland, TX 78209 | ensolum.com



characterization desktop review are presented on page 3 of the Form C-141, Site Assessment/Characterization.

Depth to groundwater at the Site is estimated to be greater than 100 feet below ground surface (bgs) based on the nearest groundwater well data. The closest permitted groundwater well with depth to groundwater data is United States Geological Survey (USGS) well 320628103533001, located approximately 0.21 miles southwest of the Site. The groundwater well has a reported depth to groundwater of 264 feet bgs and a total depth of 288 feet bgs. Ground surface elevation at the groundwater well location is 3,207 feet above mean sea level (amsl), which is approximately 28 feet lower in elevation than the Site.

The closest continuously flowing or significant watercourse to the Site is an intermittent dry wash, located approximately 315 feet south of the Site. The Site is greater than 200 feet from any 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). Potential Site receptors are identified on Figure 1 and the referenced well records are included in Appendix A.

Based on the results of the Site Characterization, the following NMOCD Table 1, Closure Criteria for Soils Impacted by a Release (19.15.29.12 NMAC; Closure Criteria) will 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 (TPH-GRO, TPH-DRO, and TPH oil-range organics (ORO)): 2,500 mg/kg
- Chloride: 20,000 mg/kg

SITE ASSESSMENT ACTIVITIES

On June 17, 2022, Ensolum personnel visited the Site to evaluate the release extent based on information provided on the Form C-141 and visual observations. Preliminary soil samples SS01 through SS03 were collected within the release extent at a depth of approximately 0.5 feet bgs to assess the impacts to soil. The preliminary soil samples were field screened for volatile aromatic hydrocarbons and chloride utilizing a calibrated photoionization detector (PID) and Hach® chloride QuanTab® test strips, respectively. The release extent and preliminary soil sample locations were mapped utilizing a handheld Global Positioning System (GPS) unit and are depicted on Figure 2. Photographic documentation was completed during the Site assessment and a photographic log is included in Appendix B.

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



Laboratory analytical results indicated TPH-GRO/TPH-DRO concentrations in preliminary soil samples SS01 and SS02 and TPH concentrations in preliminary soil sample SS02 exceeded the Closure Criteria. BTEX and chloride concentrations in all preliminary soil samples were compliant with the Closure Criteria. Based on visible staining in the release area, elevated field screening results, and laboratory analytical results for preliminary soil samples SS01 and SS02, excavation and delineation activities appeared warranted.

DELINEATION AND EXCAVATION SOIL SAMPLING ACTIVITIES

On August 30 and 31, 2022, Ensolum personnel were at the Site to oversee delineation and excavation activities. Delineation samples from potholes PH01 through PH03 were advanced in the vicinity of the preliminary soil sample locations to assess the extent of the release. Potholes PH01 through PH03 were advanced within the release extent via trackhoe to depths extending to 1-foot bgs. Additionally, surface samples SS04 through SS07 were collected at depths of 0.5 feet bgs laterally to assess the lateral extent of the release.

The delineation soil samples were field screened for volatile aromatic hydrocarbons and chloride and the screening results were utilized to direct excavation actvities.. Field screening results and observations for the potholes were logged on lithologic/soil sampling logs, which are included in Appendix C. The potholes and delineation soil sample locations are depicted on Figure 2.

Impacted soil was excavated from the release area as indicated by visible staining, field screening, and laboratory analytical results at preliminary soil sample locations SS01 and SS02. Excavation activities were performed using a backhoe and transport vehicle. To direct excavation activities, Ensolum personnel screened soil for volatile aromatic hydrocarbons and chloride. Following removal of impacted soil, Ensolum personnel collected 5-point composite soil samples representing no more than 200 square feet from the sidewalls and floor of the excavation. The 5-point composite samples were collected by placing five equivalent aliquots of soil into a 1-gallon, resealable plastic bag and homogenizing the samples by thoroughly mixing. Composite soil samples FS01 through FS11 were collected from the floor of the excavation at a depth of of 1 foot bgs. Due to the shallow depth of the excavation, sidewalls of the excavation were included in the composite samples. The excavation soil samples were collected, handled, and analyzed following the same procedures as described above. The excavation extent and excavation soil sample locations are presented on Figure 3.

The final excavation extent measured approximately 2,156 square feet. A total of approximately 80 cubic yards of impacted soil were removed during the excavation activities. The impacted soil was transported, manifested, and properly disposed of at the R360 Facility in Hobbs, New Mexico. The excavation areas were secured with fencing after confirmation sampling was completed.

LABORATORY ANALYTICAL RESULTS

Laboratory analytical results for delineation soil samples SS04 through SS07, collected at 0.5 feet bgs and pothole samples PH01 through PH03 collected at 1-foot bgs indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the strictest Table 1 Closure Criteria, and demonstrated lateral and vertical delineation of the release. Laboratory analytical results for excavation soil samples FS01 through FS11 indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with Table 1 Closure Criteria.

Laboratory analytical results are summarized in Table 1 and the complete laboratory analytical reports are included as Appendix D. Appendix E provides NMOCD correspondence email notification receipts associated with the subject release.



CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address Incident Number NAPP2210942764.

Laboratory analytical results for the excavation soil samples, collected from the final excavation extent, indicated benzene, BTEX, TPH-GRO/TPH-DRO, TPH, and chloride concentrations were compliant with the Site Closure Criteria. In addition, delineation soil samples SS04 through SS07 and PH01 through PH03 at 1-foot bgs provide lateral and vertical delineation of the release to the strictest Table 1 Closure Criteria. Based on the soil sample analytical results, no further remediation appeared required. XTO will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The safety data sheet (SDS) for friction reducer is provided in Appendix F.

Excavation of impacted soil has mitigated impacts at this Site. Depth to groundwater has been estimated to be greater than 100 feet bgs and no other sensitive receptors were identified near the release extent. XTO believes these remedial actions are protective of human health, the environment, and groundwater. As such, XTO respectfully requests closure for Incident Number NAPP2210942764.

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

Sincerely, Ensolum, LLC

Benjamin J. Belill Project Geologist

cc: Garrett Green, XTO Shelby Pennington, XTO

S.J. Delill

Ashley L. Ager, M.S., PG Program Director

ashley L. ager

Appendices:

Figure 1 Site Receptor Map

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

Appendix B Photographic Log

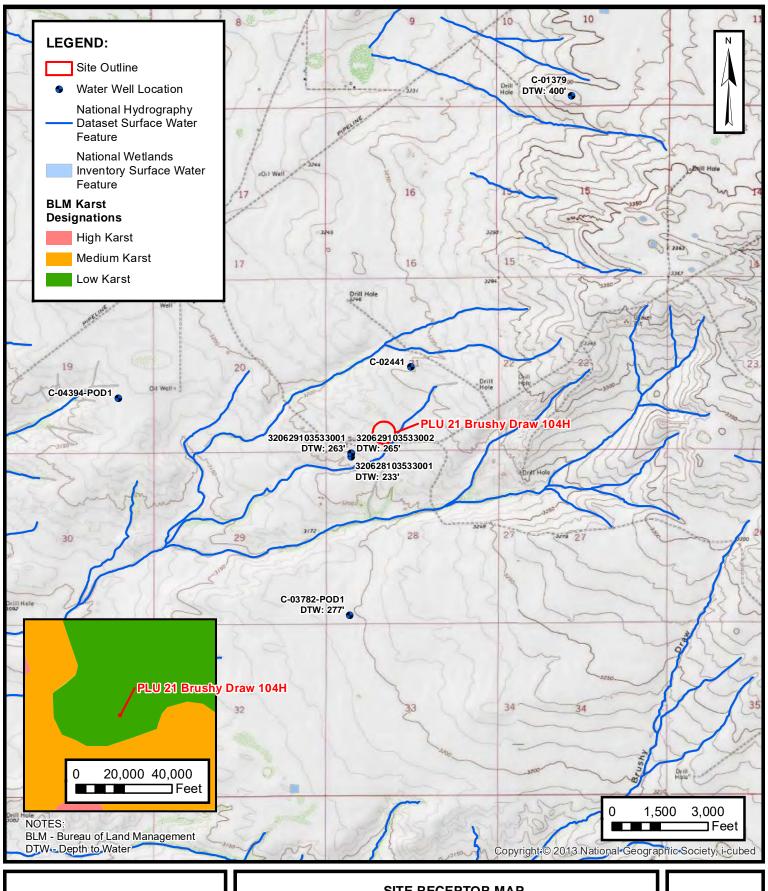
Appendix C Lithologic / Soil Sampling Logs

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

Appendix E NMOCD Notifications
Appendix F Friction Reducer SDS



Figures



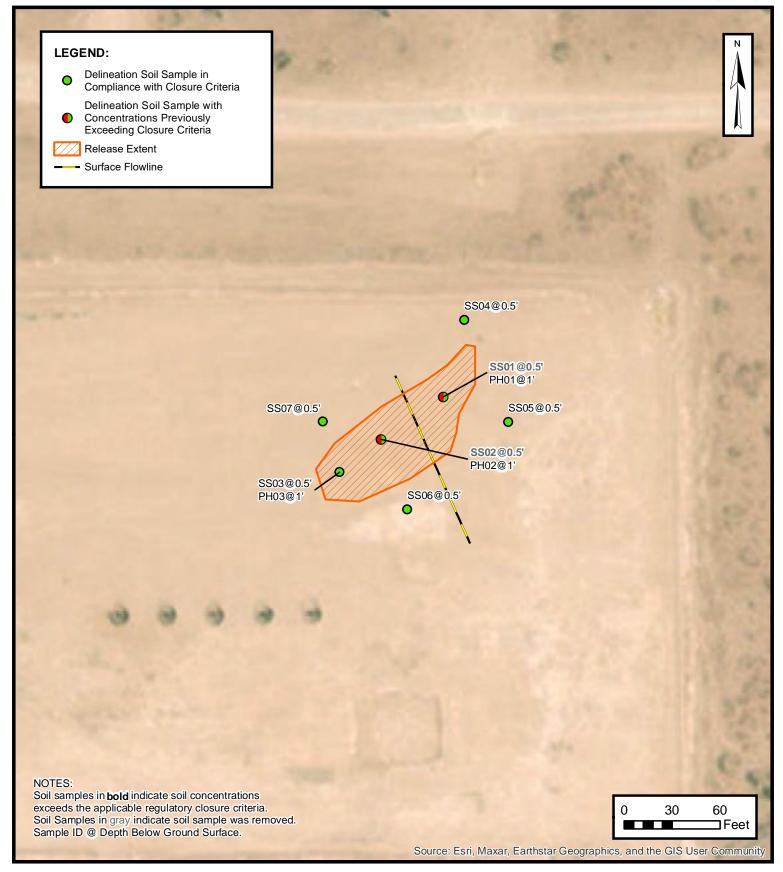


SITE RECEPTOR MAP

XTO ENERGY, INC PLU 21 BRUSHY DRAW 104H NAPP2210942764 Unit N, Sec 21, T25S, R30E

Eddy County, New Mexico

FIGURE



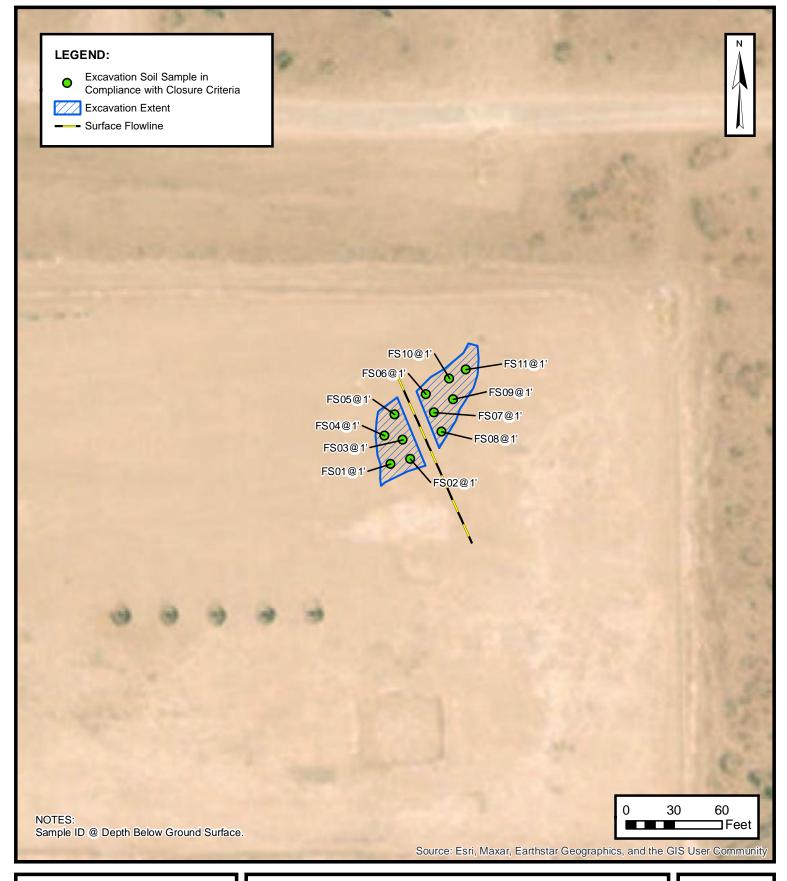


DELINEATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC
PLU 21 BRUSHY DRAW 104H
NAPP2210942764
Unit N, Sec 21, T25S, R30E
Eddy County, New Mexico

FIGURE

2





EXCAVATION SOIL SAMPLE LOCATIONS

XTO ENERGY, INC PLU 21 BRUSHY DRAW 104H NAPP2210942764 Unit N, Sec 21, T25S, R30E Eddy County, New Mexico

3

FIGURE

Released to Imaging: 12/13/2022 9:35:50 AM



Tables



TABLE 1 **SOIL SAMPLE ANALYTICAL RESULTS** PLU 21 Brushy Draw 104H XTO Energy, Inc. **Eddy County, New Mexico**

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 Closure Criteria (NMAC 19.15.29)		10	50	NE	NE	NE	1,000	2,500	20,000	
				Deli	neation Soil Sa	mples	!		 	
SS01	06/17/2022	0.5	< 0.00199	<0.00398	69.9	2,370	<500	2,440	2,440	13,400
PH01	08/30/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	219
SS02	06/17/2022	0.5	< 0.00201	<0.00402	85.8	3,330	<49.8	3,416	3,420	12,800
PH02	08/30/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	66.3
SS03	06/17/2022	0.5	<0.00199	<0.00398	<49.8	131	392	131	523	4,780
PH03	08/30/2022	1	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	276
SS04	08/30/2022	0.5	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	165
SS05	08/30/2022	0.5	<0.00201	<0.00402	<50.0	<50.0	<50.0	<50.0	<50.0	125
SS06	08/30/2022	0.5	<0.00198	<0.00396	<49.9	<49.9	<49.9	<49.9	<49.9	252
SS07	08/30/2022	0.5	<0.00201	<0.00402	<49.8	<49.8	<49.8	<49.8	<49.8	373
				Con	firmation Soil Sa	mples				
FS01	08/31/2022	1	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	4,410
FS02	08/31/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	2,470
FS03	08/31/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	1,130
FS04	08/31/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	5,300
FS05	08/31/2022	1	<0.00202	<0.00404	<49.9	<49.9	<49.9	<49.9	<49.9	555
FS06	08/31/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	205
FS07	08/31/2022	1	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	2,880
FS08	08/31/2022	1	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	2,540
FS09	08/31/2022	1	<0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	7,220
FS10	08/31/2022	1	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	305
FS11	08/31/2022	1	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,300

Notes:

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

NMOCD: New Mexico Oil Conservation Division BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Grey text indicate soil sample removed during excavation activities

GRO: Gasoline Range Organics DRO: Diesel Range Organics ORO: Oil Range Organics TPH: Total Petroleum Hydrocarbon

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

Ensolum 1 of 1



APPENDIX A

Referenced Well Records



USGS Home Contact USGS Search USGS

National Water Information System: Web Interface

USGS Water Resources

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

Click to hideNews Bulletins

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

Groundwater levels for the Nation

■ Important: Next Generation Monitoring Location Page

Search Results -- 1 sites found

Agency code = usgs site_no list =

• 320628103533001

Minimum number of levels = 1

Save file of selected sites to local disk for future upload

USGS 320628103533001 25S.30E.21.333424

Eddy County, New Mexico Latitude 32°06'28", Longitude 103°53'30" NAD27

Table of data

Tab-separated data

Graph of data

Land-surface elevation 3,207 feet above NAVD88

The depth of the well is 288 feet below land surface.

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

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

Output formats

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

Explanation

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

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

Accessibility FOIA Privacy Policies and Notices

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

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

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





APPENDIX B

Photographic Log



Photographic Log
XTO Energy, Inc.
PLU 21 Brushy Draw 104H
Incident Number: NAPP2210942764





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

Photograph 2 Date: June 17, 2022 Description: Site Assessment Activities



Photograph 3 Date: August 30, 2022 Description: Excavation Activities



Photograph 4 Date: August 30, 2022 Description: Excavation Activities



APPENDIX C

Lithologic Soil Sampling Logs

								Canada Nama BUO4	D-t 0/20/2022
		E	N	S	OL	_ U	M	Sample Name: PH01 Site Name: PLU 21 BD 104H	Date: 8/30/2022
					Engineer				C.A.
	- 2				onsultar			Incident Number: NAPP22109427	64
					SAMPLING			Job Number: 03E1558053	NACH CALT
Caand					AWIPLING	LUG		Logged By: KP	Method: Trackhoe Total Depth: 1'
		2.1099, -1			ith UACU Ch	Jarida Tast (tring and	Hole Diameter: N/A PID for chloride and vapor, respec	· ·
			_		l to distilled		otrips and	FID for Cilionae and Vapor, respec	tively. Chioride test
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
M	948	0.7	N N	SS01 PH01	0.5	1 0		0-1', CALICHE w/ fine sand, small sub-round gravel, r no H/C odor, fill. Total Depth at 1-foot bgs.	moist, tan, some
						- - - - - - - - - - - - - - - - - - -			

								Canada Nama BUO2	Data: 0/20/2022	
		E	N	S	OL	_ U	M	Sample Name: PH02 Site Name: PLU 21 BD 104H	Date: 8/30/2022	
					Engineeri			Incident Number: NAPP2210942764		
					onsultan				64	
					SAMPLING			Job Number: 03E1558053	Name of Tax II	
Caand					AWIPLING	LUG		Logged By: KP	Method: Trackhoe Total Depth: 1'	
		2.1099, -1			ii+h UACU Ch	Jarida Tast (tring and	Hole Diameter: N/A PID for chloride and vapor, respect	·	
			_		I to distilled		strips and	PID for Chloride and Vapor, respect	tively. Chioride test	
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De:	scriptions	
М	880 <112	3.1	Z	SS02 PH02	0.5	0 1		0-1', CALICHE w/ fine sand, small sub-round gravel, r no H/C odor, fill. Total Depth at 1-foot bgs.	moist, tan, some	
						- - - - - - - - - - - - - - - - - - -				

			A	C	<u> </u>			Sample Name: PH03	Date: 8/30/2022
			N	5	OL	J	M	Site Name: PLU 21 BD 104H	Butc. 6/ 36/ 2022
		Envir	onm	nental, E	Engineer	ing and		Incident Number: NAPP22109427	64
	- 2	Hydro	oge	ologic C	onsultar	nts		Job Number: 03E1558053	-
		LITHOL	OGIO	C / SOIL S	SAMPLING	LOG		Logged By: KP	Method: Trackhoe
Coord		2.1099, -1						Hole Diameter: N/A	Total Depth: 1'
					ith HACH Ch	loride Test S	trips and	PID for chloride and vapor, respec	· ·
			_		l to distilled		·	, , ,	•
ure	ide n)	or n)	ing	le ID	Sample	Depth	Rock		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Depth (ft bgs)	(ft bgs)	USCS/Rock Symbol	Lithologic De	scriptions
					1	0	CCHE (fill)	0-1', CALICHE w/ fine sand, small sub-round gravel, I no H/C odor, fill.	moist, tan, some no stain,
	2.40				-	- -		110 117 € 6001, 1111.	
M	948	6.2	N	SS03	0.5	_			
						_			
М	<112	0.0	N	PH03	1 _	_ 1	TD	Total Donth at 1 foot has	
					-	-	ID	Total Depth at 1-foot bgs.	
					_	-			
					_	_			
					_	-			
					-	-			
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APPENDIX D

Laboratory Analytical Reports & Chain-of-Custody Documentation



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2426-1

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

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 6/24/2022 5:52:42 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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

Laboratory Job ID: 890-2426-1 SDG: 03E1558053

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Definitions/Glossary

Job ID: 890-2426-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier

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

F1 MS and/or MSD recovery exceeds control limits.

Indicates the analyte was analyzed for but not detected.

Qualifier Description

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum

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

Job ID: 890-2426-1

SDG: 03E1558053

Job ID: 890-2426-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2426-1

Receipt

The sample was received on 6/17/2022 4:33 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: o-Xylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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

GC Semi VOA

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

HPLC/IC

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

Matrix: Solid

Job ID: 890-2426-1

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

Client Sample ID: SS03

Lab Sample ID: 890-2426-1

Date Collected: 06/17/22 13:00 Date Received: 06/17/22 16:33

Sample Depth: 0.5'

Client: Ensolum

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:31	
Toluene	< 0.00199	U F1	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:31	•
Ethylbenzene	< 0.00199	U F1	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:31	•
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		06/21/22 14:42	06/21/22 23:31	
o-Xylene	< 0.00199	U F1 *+	0.00199	mg/Kg		06/21/22 14:42	06/21/22 23:31	•
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		06/21/22 14:42	06/21/22 23:31	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	97		70 - 130			06/21/22 14:42	06/21/22 23:31	
1,4-Difluorobenzene (Surr)	88		70 - 130			06/21/22 14:42	06/21/22 23:31	1
Method: Total BTEX - Total BTE	EX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/22/22 12:17	
Method: 8015 NM - Diesel Rang	ge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	523		49.8	mg/Kg			06/22/22 11:20	,
Method: 8015B NM - Diesel Rai	nge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		06/21/22 11:35	06/22/22 03:28	,
Diesel Range Organics (Over C10-C28)	131		49.8	mg/Kg		06/21/22 11:35	06/22/22 03:28	,
Oll Range Organics (Over C28-C36)	392		49.8	mg/Kg		06/21/22 11:35	06/22/22 03:28	•
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	111		70 - 130			06/21/22 11:35	06/22/22 03:28	1
o-Terphenyl	119		70 - 130			06/21/22 11:35	06/22/22 03:28	
Method: 300.0 - Anions, Ion Ch	romatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4780		50.0	mg/Kg			06/24/22 13:31	10

Eurofins Carlsbad

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2426-1

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2426-1	SS03	97	88	
890-2426-1 MS	SS03	110	99	
890-2426-1 MSD	SS03	91	93	
LCS 880-28063/1-A	Lab Control Sample	121	100	
LCSD 880-28063/2-A	Lab Control Sample Dup	110	104	
MB 880-27967/5-A	Method Blank	93	110	
MB 880-28063/5-A	Method Blank	95	107	

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

OTPH = o-Terphenyl

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-16078-A-21-B MS	Matrix Spike	82	79	
880-16078-A-21-C MSD	Matrix Spike Duplicate	86	82	
890-2426-1	SS03	111	119	
LCS 880-28045/2-A	Lab Control Sample	104	110	
LCSD 880-28045/3-A	Lab Control Sample Dup	104	113	
MB 880-28045/1-A	Method Blank	102	119	
Surrogate Legend				

Eurofins Carlsbad

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Client: Ensolum Job ID: 890-2426-1 SDG: 03E1558053 Project/Site: PLU 21 BD 104H, 123H, 124H

Method: 8021B - Volatile Organic Compounds (GC)

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

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

Matrix: Solid

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 27967

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

MB MB

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

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

Analyzed

Prepared

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 28063

Analysis Batch: 28005 мв мв

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

MB MB

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

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

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 28063

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

LCS LCS

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

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

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab	Control Sample Dup
	Donner Towner Tokel/NIA

Prep Type: Total/NA

Prep Batch: 28063

	Бріке	LCSD LCSD				%Rec		RPD	
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1045	mg/Kg		105	70 - 130	6	35	

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Dil Fac

6/24/2022

QC Sample Results

Job ID: 890-2426-1 Client: Ensolum Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

Lab Sample ID: LCSD 880-28063/2-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 28005** Prep Batch: 28063 Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D Toluene 0.100 0.1127 113 70 - 130 35 mg/Kg 3 Ethylbenzene 0.100 0.1015 mg/Kg 102 70 - 130 10 35 0.200 m-Xylene & p-Xylene 0.2046 102 70 - 130 35 mg/Kg 13 o-Xylene 0.100 0.1150 mg/Kg 115 70 - 130 13 35

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

Lab Sample ID: 890-2426-1 MS

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 28005** Prep Batch: 28063 MS MS %Rec Sample Sample Spike

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

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

Lab Sample ID: 890-2426-1 MSD

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: SS03 Prep Type: Total/NA Prep Batch: 28063

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

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

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

Matrix: Solid

Analysis Batch: 27998

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

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 28045

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

(GRO)-C6-C10

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Client Sample ID: SS03

QC Sample Results

Client: Ensolum Job ID: 890-2426-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

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

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

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			06/21/22 11:35	06/21/22 21:37	1
o-Terphenyl	119		70 - 130			06/21/22 11:35	06/21/22 21:37	1

Lab Sample ID: LCS 880-28 Matrix: Solid	U45/2-A						Cilent	Sample	ID: Lab Contro Prep Type:	
Analysis Batch: 27998									Prep Bato	h: 280
-			Spike	LCS	LCS				%Rec	
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics			1000	992.5		mg/Kg		99	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over			1000	1042		mg/Kg		104	70 - 130	
C10-C28)										
	LCS	LCS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	104		70 - 130							
o-Terphenyl	110		70 - 130							

Lab Sample ID: LCSD 880-28045/3-A Matrix: Solid Analysis Batch: 27998				Client	San	nple ID:		ol Sampl Type: To Batch:	tal/NA
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	1036		mg/Kg		104	70 - 130	4	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1061		mg/Kg		106	70 - 130	2	20
C10-C28)									

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

Lab Sample ID: 880-16078-A Matrix: Solid Analysis Batch: 27998	A-21-B MS							Client	Prep 1	: Matrix Spike Type: Total/NA Batch: 28045
	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	905.3		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	799.1		mg/Kg		80	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane	82		70 - 130							
o-Terphenyl	79		70 - 130							

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Job ID: 890-2426-1

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

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

Lab Sample ID: 880-16078-A-21-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA **Analysis Batch: 27998** Prep Batch: 28045

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	999	933.1		mg/Kg		89	70 - 130	3	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	999	845.4		mg/Kg		85	70 - 130	6	20
C10-C28)											

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 86 o-Terphenyl 82 70 - 130

Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 28185

мв мв

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

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

Analysis Batch: 28185

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

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

Matrix: Solid

Analysis Batch: 28185

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

Lab Sample ID: 820-4663-A-67-I MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 28185

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	344		251	600.1		ma/Ka		102	90 110	

Lab Sample ID: 820-4663-A-67-J MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 28185

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	344		251	601.1		mg/Kg		103	90 - 110	0	20

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Prep Type: Soluble

QC Association Summary

Client: Ensolum

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

Job ID: 890-2426-1 SDG: 03E1558053

GC VOA

Prep Batch: 27967

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

Analysis Batch: 28005

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

Prep Batch: 28063

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

Analysis Batch: 28143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2426-1	SS03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID 890-2426-1	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 28045
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015B NM	28045
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28045
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28045
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28045
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID 890-2426-1	Client Sample ID SS03	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28127

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2426-1	SS03	Total/NA	Solid	8015 NM	

QC Association Summary

 Client: Ensolum
 Job ID: 890-2426-1

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

HPLC/IC

Leach Batch: 27963

Lab Sample ID 890-2426-1	Client Sample ID SS03	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
820-4663-A-67-I MS	Matrix Spike	Soluble	Solid	DI Leach	
820-4663-A-67-J MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2426-1	SS03	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
820-4663-A-67-I MS	Matrix Spike	Soluble	Solid	300.0	27963
820-4663-A-67-J MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27963

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Lab Chronicle

Client: Ensolum Job ID: 890-2426-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Client Sample ID: SS03 Lab Sample ID: 890-2426-1 Date Collected: 06/17/22 13:00

Matrix: Solid

Date Received: 06/17/22 16:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	28063	06/21/22 14:42	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/21/22 23:31	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28143	06/22/22 12:17	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28127	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 03:28	SM	XEN MID
Soluble	Leach	DI Leach			5 g	50 mL	27963	06/21/22 12:47	SC	XEN MID
Soluble	Analysis	300.0		10			28185	06/24/22 13:31	SC	XEN MID

Laboratory References:

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

Eurofins Carlsbad

Released to Imaging: 12/13/2022 9:35:50 AM

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2426-1 Project/Site: PLU 21 BD 104H, 123H, 124H SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NI	ELAP	T104704400-21-22	06-30-22
The following analytes the agency does not of	. ,	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for wh
Analysis Method	Prep Method	Matrix	Analyte	
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH	

Method Summary

Client: Ensolum

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

Job ID: 890-2426-1

SDG: 03E1558053

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	XEN MID
otal BTEX	Total BTEX Calculation	TAL SOP	XEN MID
3015 NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
015B NM	Diesel Range Organics (DRO) (GC)	SW846	XEN MID
800.0	Anions, Ion Chromatography	MCAWW	XEN MID
5035	Closed System Purge and Trap	SW846	XEN MID
015NM Prep	Microextraction	SW846	XEN MID
Ol Leach	Deionized Water Leaching Procedure	ASTM	XEN 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:

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

Sample Summary

Client: Ensolum

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

Job ID: 890-2426-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2426-1	SS03	Solid	06/17/22 13:00	06/17/22 16:33	0.5'

eurofins Xenco Environment Testing

Project Number: Project Location:

Project Name:

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

Turn Around

Rush

Code

Cool: Cool None: NO

HNO3: HN

DI Water: H₂O MeOH: Me

bbelill@ensolum.com

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

Carlsbad, NM 88220

3104 E. Green Street XTO Energy, Inc. Garrett Green

EDDY COUNTY, NM 03E1558053

Due Date: ✓ Routine City, State ZIP:

Carlsbad, NM 88220

3122 National parks Hwy

9898540852

Company Name: Project Manager:

Ensolum, LLC Ben Belill

Chain of Custody

Midland, TX (432) 704-5440, San Antonio, TX (210) 5 EL Paso, TX (915) 585-3443, Lubbock, TX (806) 79 Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 98 Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

09-3334	Work Order No:
4-1296	
8-3199	
	www.xenco.com Page1_ of1
	Work Order Comments
	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
	State of Project:
	Reporting: Level II Level III PST/UST TRRP Level IV
	Deliverables: EDD ADaPT Other:
NAI YSIS REQUEST	OUEST Preservative Codes

		6							
		433	اا ددادام	راها	t Suit	endas	3	colur	f Grabons
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time		ture)	Received by: (Signature)		ignature)	Relinquished by: (Signature)
	It assigns standard terms and conditions edue to circumstances beyond the control will be enforced unless previously negotiated.	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiat	mpany to Eurofins Xen losses or expenses in ubmitted to Eurofins X	ty for an	urchase order from me any responsibl arge of \$5 for each	ples constitutes a valid p amples and shall not assu d to each project and a ch	quishment of sarr for the cost of sa i.00 will be applie	ment and relind III be liable only m charge of \$85	ce: Signature of this doct ervice. Eurofins Xenco w urofins Xenco. A minimu
470 / /4/1	₃ TI U Hg: 1631 / 245.1 / 7470 / 74/1	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U	Sb As Ba Be C	℃RA	TCLP / SPLP 6010: 8RCRA	TCLP/S	e analyzed	Metal(s) to b	Circle Method(s) and Metal(s) to be analyzed
Sn ∪ ∨ Zn	K Se A	- 1	b As Ba Be B	Al S	13PPM Texas 11 Al Sb As	8RCRA 13F	3020:	200.8 / 6020:	Total 200.7 / 6010
NAPP2211151438	NA								
NAPP2211651017,	ZA								
NAPP2210942764	ZA								
Incident Numbers:	Inc								
1666401001, 166601001	16664								
Cost Centers: 1666351001,	Cost Co		×	1	0.5' Grab/	6/17/2022 1300	S 6/1		SS03
Sample Comments	Sar		TPH (8	# of Cont	Depth Grab/	Date Time Sampled Sampled	Matrix Sa	cation	Sample Identification
NaOH+Ascorbic Acid: SAPC	NaOH+A:		015)		14 C	Corrected Temperature:	Corn		Total Containers:
Zn Acetate+NaOH: Zn	Zn Acetal	890-2426 Chain of Custody		, , , , , , , , , , , , , , , , , , ,	12.0	Temperature Reading:	NIE	Yes No	Sample Custody Seals:
NaSO ₃	Na ₂ S ₂ O ₃ . NaSO ₃		PA:	Pa	6.0°	NIA Correction Factor:		Yes No	Cooler Custody Seals:
NABIS	NaHSO ₄ : NABIS		300	arar	17700	Thermometer ID:	No Ther	t: Kes	Samples Received Intact
Ð	Н₃РО₄: НР		.0)	nete	(es) No	Yes No Wet Ice:		Temp Blank:	SAMPLE RECEIPT
2 NaOH: Na	H ₂ SO ₄ : H ₂			rs	the lab, if received by 4:30pm	the lab, if rec			PO#:
	HCL: HC				TAT starts the day received by	TAT starts th	Falesc	SYEA	Sampler's Name: (

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2426-1 SDG Number: 03E1558053

Login Number: 2426 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

Sample Preservation Verified.

MS/MSDs

<6mm (1/4").

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

Containers requiring zero headspace have no headspace or bubble is

Question Answer Comment The cooler's custody seal, if present, is intact. True Sample custody seals, if present, are intact. True The cooler or samples do not appear to have been compromised or True tampered with. Samples were received on ice. True True Cooler Temperature is acceptable. Cooler Temperature is recorded. True COC is present. True COC is filled out in ink and legible. True COC is filled out with all pertinent information. True Is the Field Sampler's name present on COC? True There are no discrepancies between the containers received and the COC. True Samples are received within Holding Time (excluding tests with immediate True

HTs) Sample containers have legible labels. True Containers are not broken or leaking. True Sample collection date/times are provided. True Appropriate sample containers are used. True Sample bottles are completely filled. True

N/A

True

N/A

Login Sample Receipt Checklist

Client: Ensolum

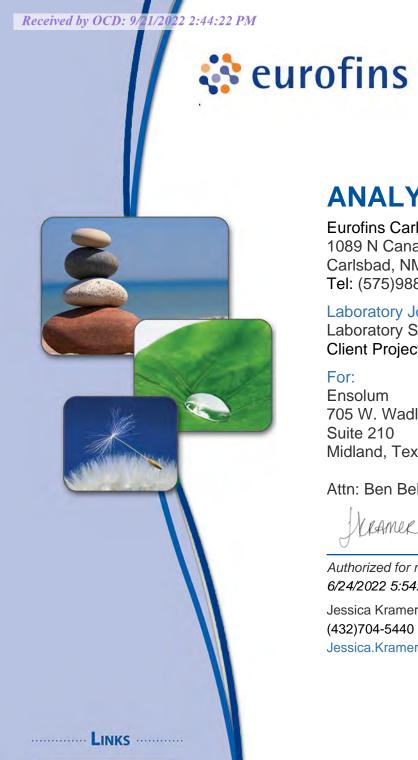
Job Number: 890-2426-1 SDG Number: 03E1558053

Login Number: 2426 **List Source: Eurofins Midland** List Number: 2 List Creation: 06/21/22 10:52 AM

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2430-1

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

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 6/24/2022 5:54:05 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

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

Laboratory Job ID: 890-2430-1 SDG: 03E1558053

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Definitions/Glossary

Job ID: 890-2430-1 Client: Ensolum Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA Qualifier

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

F1 MS and/or MSD recovery exceeds control limits.

Qualifier Description

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

Minimum Detectable Concentration (Radiochemistry) MDL Method Detection Limit

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

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

Job ID: 890-2430-1

SDG: 03E1558053

Job ID: 890-2430-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2430-1

Receipt

The sample was received on 6/17/2022 4:33 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.0°C

GC VOA

Method 8021B: The laboratory control sample (LCS) for preparation batch 880-28063 and analytical batch 880-28005 recovered outside control limits for the following analytes: o-Xylene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-28063 and analytical batch 880-28005 was outside control limits. Sample matrix interference is suspected.

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

GC Semi VOA

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

HPLC/IC

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

Client Sample Results

Client: Ensolum Job ID: 890-2430-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Lab Sample ID: 890-2430-1 **Client Sample ID: SS01** Date Collected: 06/17/22 12:20

Matrix: Solid

Sample Depth: 0.5'

Date Received: 06/17/22 16:33

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:54	
Toluene	<0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:54	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:54	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 00:54	
o-Xylene	< 0.00199	U *+	0.00199	mg/Kg		06/21/22 14:42	06/22/22 00:54	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		06/21/22 14:42	06/22/22 00:54	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	119		70 - 130			06/21/22 14:42	06/22/22 00:54	
1,4-Difluorobenzene (Surr)	107		70 - 130			06/21/22 14:42	06/22/22 00:54	
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			06/22/22 12:17	
Method: 8015 NM - Diesel Range Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	2440		500	mg/Kg			06/22/22 11:20	
· Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	69.9	Qualifier	RL 49.9	Mg/Kg	<u>D</u>	Prepared 06/21/22 11:35	Analyzed 06/22/22 04:30	Dil Fa
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over		Qualifier			<u>D</u>	<u>·</u>		
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	69.9	·	49.9	mg/Kg	<u>D</u>	06/21/22 11:35	06/22/22 04:30	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	69.9	U	49.9	mg/Kg	<u>D</u>	06/21/22 11:35 06/21/22 11:35	06/22/22 04:30 06/22/22 04:30	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	69.9 2370 <500	U	49.9 49.9 500	mg/Kg	<u>D</u>	06/21/22 11:35 06/21/22 11:35 06/22/22 14:48	06/22/22 04:30 06/22/22 04:30 06/22/22 22:59	11
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	69.9 2370 <500 %Recovery	U	49.9 49.9 500 <i>Limits</i>	mg/Kg	<u>D</u>	06/21/22 11:35 06/21/22 11:35 06/22/22 14:48 Prepared	06/22/22 04:30 06/22/22 04:30 06/22/22 22:59 Analyzed	10 Dil Fa
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	69.9 2370 <500 **Recovery 112 107	U Qualifier	49.9 49.9 500 Limits 70 - 130	mg/Kg	<u>D</u>	06/21/22 11:35 06/21/22 11:35 06/22/22 14:48 Prepared 06/21/22 11:35	06/22/22 04:30 06/22/22 04:30 06/22/22 22:59 Analyzed 06/22/22 04:30	10
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: 300.0 - Anions, Ion Chro	69.9 2370 <500 **Recovery 112 107 comatography -	U Qualifier	49.9 49.9 500 Limits 70 - 130	mg/Kg	<u>D</u>	06/21/22 11:35 06/21/22 11:35 06/22/22 14:48 Prepared 06/21/22 11:35	06/22/22 04:30 06/22/22 04:30 06/22/22 22:59 Analyzed 06/22/22 04:30	10

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2430-1

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-			
		BFB1	DFBZ1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2426-A-1-C MS	Matrix Spike	110	99
890-2426-A-1-D MSD	Matrix Spike Duplicate	91	93
890-2430-1	SS01	119	107
LCS 880-28063/1-A	Lab Control Sample	121	100
LCSD 880-28063/2-A	Lab Control Sample Dup	110	104
MB 880-27967/5-A	Method Blank	93	110
MB 880-28063/5-A	Method Blank	95	107
Surrogate Legend			
BFB = 4-Bromofluoroben:	zene (Surr)		

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-16078-A-21-B MS	Matrix Spike	82	79	
880-16078-A-21-C MSD	Matrix Spike Duplicate	86	82	
890-2430-1	SS01	112	107	
LCS 880-28045/2-A	Lab Control Sample	104	110	
LCSD 880-28045/3-A	Lab Control Sample Dup	104	113	
MB 880-28045/1-A	Method Blank	102	119	
Surrogate Legend				

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2430-1 SDG: 03E1558053 Project/Site: PLU 21 BD 104H,123H, 124H

Method: 8021B - Volatile Organic Compounds (GC)

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

Analysis Batch: 28005

Matrix: Solid

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

Prep Batch: 27967

Prep Batch: 28063

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

MB MB

MR MR

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

Lab Sample ID: MB 880-28063/5-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 28005

	IIID	1410						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Toluene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/21/22 14:42	06/21/22 23:09	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/21/22 14:42	06/21/22 23:09	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepare	d Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130	06/21/22 14	4:42 06/21/22 23:0	09 1
1,4-Difluorobenzene (Surr)	107		70 - 130	06/21/22 14	4:42 06/21/22 23:0	09 1

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

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 28063

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

LCS LCS

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

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

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

Spike LCSD LCSD RPD %Rec Result Qualifier Analyte Added Unit %Rec Limits RPD Limit Benzene 0.100 0.1045 mg/Kg 105 70 - 130 6

QC Sample Results

Client: Ensolum Job ID: 890-2430-1 SDG: 03E1558053 Project/Site: PLU 21 BD 104H,123H, 124H

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

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

Matrix: Solid Analysis Batch: 28005 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 28063

	%Rec		RPD
%Rec	Limits	RPD	Limit
113	70 - 130	3	35
102	70 - 130	10	35
102	70 - 130	13	35
115	70 - 130	13	35
9	113 102 102	KRec Limits 113 70 - 130 102 70 - 130 102 70 - 130	KRec Limits RPD 113 70 - 130 3 102 70 - 130 10 102 70 - 130 13

LCSD LCSD

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

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

Matrix: Solid

Analysis Batch: 28005

Prep Type: Total/NA

Prep Batch: 28063

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

MS MS

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

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

Matrix: Solid

Analysis Batch: 28005

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28063

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

MSD MSD

MD MD

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

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

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

Matrix: Solid

Analysis Batch: 27998

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

Prep Batch: 28045

	IVID	IAID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
(GRO)-C6-C10								

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6/24/2022

o-Terphenyl

Client: Ensolum Job ID: 890-2430-1 Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

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

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

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		06/21/22 11:35	06/21/22 21:37	1
	МВ	МВ						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	102		70 - 130			06/21/22 11:35	06/21/22 21:37	1
o-Terphenyl	119		70 - 130			06/21/22 11:35	06/21/22 21:37	1

Lab Sample ID: LCS 880-28045/2-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 27998 Prep Batch: 28045 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 992.5 99 70 - 130 mg/Kg (GRO)-C6-C10 1000 1042 Diesel Range Organics (Over mg/Kg 104 70 - 130 C10-C28) LCS LCS Qualifier Limits Surrogate %Recovery 1-Chlorooctane 104 70 - 130

Lab Sample ID: LCSD 880-28045/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA Prep Batch: 28045 **Analysis Batch: 27998**

70 - 130

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	1036		mg/Kg		104	70 - 130	4	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1061		mg/Kg		106	70 - 130	2	20	
C10-C28)										

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

110

Lab Sample ID: 880-16078-A-21-B MS Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 27998 Prep Batch: 28045

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	998	905.3		mg/Kg		87	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	998	799.1		mg/Kg		80	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1 Chlorocotono	92		70 120							

70 - 130 1-Chlorooctane 82 79 70 - 130 o-Terphenyl

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

Job ID: 890-2430-1

SDG: 03E1558053

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

Lab Sample ID: 880-16078-A-21-C MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Prep Type: Total/NA

Analysis Batch: 27998 Prep Batch: 28045 Sample Sample Spike MSD MSD RPD

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

C10-C28)

Client: Ensolum

MSD MSD

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

Method: 300.0 - Anions, Ion Chromatography

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

Matrix: Solid

Analysis Batch: 28185

мв мв

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

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

Matrix: Solid

Analysis Batch: 28185

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

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

Matrix: Solid

Analysis Batch: 28185

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

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

Matrix: Solid

Analysis Batch: 28185

	Sample	Sample	Бріке	IVIS	IVIO				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	31300		12600	44610		mg/Kg		105	90 - 110	

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

Matrix: Solid

Analysis Ratch: 28185

Alialysis Dalcii. 20100											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	31300		12600	44560		mg/Kg		105	90 - 110	0	20

Eurofins Carlsbad

Prep Type: Soluble

Client Sample ID: Matrix Spike Duplicate

QC Association Summary

Client: Ensolum

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

Job ID: 890-2430-1 SDG: 03E1558053

2

GC VOA

Prep Batch: 27967

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

Analysis Batch: 28005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	8021B	28063
MB 880-27967/5-A	Method Blank	Total/NA	Solid	8021B	27967
MB 880-28063/5-A	Method Blank	Total/NA	Solid	8021B	28063
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	8021B	28063
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28063
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	28063
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28063

Prep Batch: 28063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	5035	_
MB 880-28063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2426-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2426-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 27998

Lab Sample ID 890-2430-1	Client Sample ID SS01	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 28045
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015B NM	28045
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	28045
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	28045
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015B NM	28045
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	28045

Prep Batch: 28045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	8015NM Prep	
MB 880-28045/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-28045/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-28045/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-16078-A-21-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-16078-A-21-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 28088

-					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
800-2430-1	\$\$01	Total/NA	Solid	8015B NM	28163

QC Association Summary

Client: Ensolum Project/Site: PLU 21 BD 104H,123H, 124H Job ID: 890-2430-1

SDG: 03E1558053

GC Semi VOA

Analysis Batch: 28130

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	8015 NM	

Prep Batch: 28163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 27963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Soluble	Solid	DI Leach	
MB 880-27963/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 28185

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2430-1	SS01	Soluble	Solid	300.0	27963
MB 880-27963/1-A	Method Blank	Soluble	Solid	300.0	27963
LCS 880-27963/2-A	Lab Control Sample	Soluble	Solid	300.0	27963
LCSD 880-27963/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	27963
890-2428-A-1-G MS	Matrix Spike	Soluble	Solid	300.0	27963
890-2428-A-1-H MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	27963

Lab Chronicle

Client: Ensolum Job ID: 890-2430-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Client Sample ID: SS01 Lab Sample ID: 890-2430-1 Date Collected: 06/17/22 12:20

Matrix: Solid

Date Received: 06/17/22 16:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	28063	06/21/22 14:42	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28005	06/22/22 00:54	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28147	06/22/22 12:17	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28130	06/22/22 11:20	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	28045	06/21/22 11:35	DM	XEN MID
Total/NA	Analysis	8015B NM		1			27998	06/22/22 04:30	SM	XEN MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	28163	06/22/22 14:48	DM	XEN MID
Total/NA	Analysis	8015B NM		10			28088	06/22/22 22:59	AJ	XEN MID
Soluble	Leach	DI Leach			5.05 g	50 mL	27963	06/21/22 12:47	SC	XEN MID
Soluble	Analysis	300.0		20			28185	06/24/22 14:26	SC	XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2430-1 Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-21-22	06-30-22	
The following analytes the agency does not of		it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo	
Analysis Method	Prep Method	Matrix	Analyte		
Analysis Method 8015 NM	Prep Method	Matrix Solid	Analyte Total TPH		

Method Summary

Client: Ensolum

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

Job ID: 890-2430-1

SDG: 03E1558053

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

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

Sample Summary

Client: Ensolum

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

Job ID: 890-2430-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2430-1	SS01	Solid	06/17/22 12:20	06/17/22 16:33	0.5'

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co

ဥ

Fe Pb Mg Mn Mo Ni K Se

Ag SiO₂

Na Sr TI Sn U V Zn

eurofins Kenco Environment Testing

Chain of Custody

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

509-3334	ALCIV CIRCLIAC	
94-1296		
88-3199		
	www.xenco.com	Page1_ of1
	Work Order Comments	omments
	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund []	ifields RRC Superfund
	State of Project:	
	Reporting: Level II Level III PST/UST TRRP Level IV	/UST TRRP Level IV
	Deliverables: EDD	Other:
ANALYSIS REQUEST	TEST	Preservative Codes

ircle Method(s) and Metal(s) to be analyzed 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 surrofins Xenco. A minimum charge of \$8.500 will be applied to each project and a charge of \$6 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiates. ilce: 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 Relinquished by: (Signature) TOMM Received by: (Signature) TCLP / SPLP 6010: 8RCRA CC12137 Sh As Ba Be Cd Cr Co Cu Ph Mn Mo Ni Se Ag TI U Date/Time Relinquished by: (Signature) Received by: (Signature) Hg: 1631 / 245.1 / 7470 / 7471 ed Date 08/25/2020 Rev. 2020. Date/Time

NaOH+Ascorbic Acid: SAPC

Sample Comments

Cost Centers: 1666351001 1666401001, 166601001

NAPP2210942764 Incident Numbers: NAPP2209736479,

NAPP2211651017, NAPP2211151438

Zn Acetate+NaOH: Zn Na2S2O3: NaSO3 NaHSO₄: NABIS H₃PO₄: HP

SAMPLE RECEIPT Samples Received Intact:

Temp Blank:

Yes No

Wet ice:

(8)

No

Parameters

S N

Thermometer ID:

No. of

Sample Custody Seals: Cooler Custody Seals:

Yes No Yes

No

AM NIA

Correction Factor: Temperature Reading:

Corrected Temperature:

Sample Identification

Matrix

Sampled 6/17/2022

Sampled

01,20

0.5

Grab/ Comp Grab/

Date

Time

Depth

Cont

of

TPH (8015) BTEX (8021

CHLORIDES (EPA: 300.0)

890-2430 Chain of Custody

Sampler's Name:

Gray Palese

EDDY COUNTY, NM

Due Date:

Routine

☐ Rush

Code

Turn Around

Email: bbelill@ensolum.com

City, State ZIP:

TAT starts the day received by

HCL: HC

HNO₃: HN NaOH: Na

Cool: Cool None: NO

DI Water: H₂O MeOH: Me

H2SO4: H2

the lab, if received by 4:30pm

oject Location:

Project Number:

roject Name:

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

03E1558053

City, State ZIP.

Carlsbad, NM 88220 3122 National parks Hwy Company Name: roject Manager:

Ensolum, LLC Ben Belill

Bill to: (if different)

ompany Name

\ddress:

3104 E. Green Street XTO Energy, Inc. Garrett Green

Carlsbad, NM 88220

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2430-1 SDG Number: 03E1558053

Login Number: 2430 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2430-1 SDG Number: 03E1558053

Login Number: 2430 **List Source: Eurofins Midland** List Number: 2 List Creation: 06/21/22 10:52 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2432-1

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

For:

eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill



Authorized for release by: 6/23/2022 1:58:08 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

Have a Question?

EOL

.....LINKS

Review your project results through

Received by OCD: 9/21/2022 2:44:22 PM

Visit us at:

www.eurofinsus.com/Env Released to Imaging: 12/13/2022 9:35:50 AM

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

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

Client: Ensolum Laboratory Job ID: 890-2432-1 Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

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Definitions/Glossary

Job ID: 890-2432-1 Client: Ensolum Project/Site: PLU 21 BD 104H,123H, 124H

SDG: 03E1558053

Qualifiers

GC VOA

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

GC Semi VOA

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossarv

Ciocoary						
Abbreviation	These commonly used abbreviations may or may not be present in this report.					
n	Listed under the "D" column to designate that the result is reported on a dry weight basis					
%R	Percent Recovery					
CFL	Contains Free Liquid					
CFU	Colony Forming Unit					
CNF	Contains No Free Liquid					
DER	Duplicate Error Ratio (normalized absolute difference)					
Dil Fac	Dilution Factor					
DL	Detection Limit (DoD/DOE)					
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample					
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

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

Not Calculated NC

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

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

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

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

Job ID: 890-2432-1

SDG: 03E1558053

Job ID: 890-2432-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2432-1

Receipt

The sample was received on 6/17/2022 4:33 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 14.0°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-28109 and 880-28109 and analytical batch 880-28093 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.

J

_

7

q

10

12

13

14

Client Sample Results

Client: Ensolum Job ID: 890-2432-1

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

Lab Sample ID: 890-2432-1 **Client Sample ID: SS02**

Date Collected: 06/17/22 12:30 Matrix: Solid Date Received: 06/17/22 16:33

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00201	U	0.00201	mg/Kg		06/22/22 09:54	06/22/22 16:22	
Toluene	<0.00201	U	0.00201	mg/Kg		06/22/22 09:54	06/22/22 16:22	
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		06/22/22 09:54	06/22/22 16:22	
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		06/22/22 09:54	06/22/22 16:22	
o-Xylene	<0.00201	U	0.00201	mg/Kg		06/22/22 09:54	06/22/22 16:22	
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		06/22/22 09:54	06/22/22 16:22	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	103		70 - 130			06/22/22 09:54	06/22/22 16:22	
1,4-Difluorobenzene (Surr)	101		70 - 130			06/22/22 09:54	06/22/22 16:22	
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00402		0.00402	mg/Kg			06/23/22 13:13	
Method: 8015 NM - Diesel Range Analyte		O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	3420		49.8	mg/Kg			06/22/22 11:20	
Mathada 0045D NM - Diagol Daws	na Omnanica (Di	DO) (OO)						
Method: 8015B NM - Diesel Ranç Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	85.8	Qualifier	49.8	mg/Kg		06/22/22 14:48	06/22/22 21:57	Dii Fa
(GRO)-C6-C10	03.0		43.0	mg/rtg		00/22/22 14.40	00/22/22 21.57	
Diesel Range Organics (Over C10-C28)	3330		49.8	mg/Kg		06/22/22 14:48	06/22/22 21:57	
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		06/22/22 14:48	06/22/22 21:57	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	130		70 - 130			06/22/22 14:48	06/22/22 21:57	
	118		70 - 130			06/22/22 14:48	06/22/22 21:57	
o-Terphenyl								
o-Terphenyl : Method: 300.0 - Anions, Ion Chro		Soluble						
	omatography -	Soluble Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2432-1

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

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-16170-A-2-B MS	Matrix Spike	89	107	
880-16170-A-2-C MSD	Matrix Spike Duplicate	90	109	
890-2432-1	SS02	103	101	
LCS 880-28109/1-A	Lab Control Sample	84	104	
LCSD 880-28109/2-A	Lab Control Sample Dup	114	100	
MB 880-28109/5-A	Method Blank	89	108	
Surrogate Legend				
BFB = 4-Bromofluorobei	nzene (Surr)			
DFBZ = 1,4-Difluoroben:	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2432-1	SS02	130	118	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2432-1 SDG: 03E1558053 Project/Site: PLU 21 BD 104H,123H, 124H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-28109/5-A

Matrix: Solid Analysis Batch: 28093 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 28109

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		06/22/22 09:54	06/22/22 15:18	•
Toluene	<0.00200	U	0.00200	mg/Kg		06/22/22 09:54	06/22/22 15:18	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		06/22/22 09:54	06/22/22 15:18	•
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		06/22/22 09:54	06/22/22 15:18	
o-Xylene	<0.00200	U	0.00200	mg/Kg		06/22/22 09:54	06/22/22 15:18	•
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		06/22/22 09:54	06/22/22 15:18	

MB MB

Surrogate	%Recovery	Qualifier Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	89	70 - 130	06/22/22 09:54	06/22/22 15:18	1
1,4-Difluorobenzene (Surr)	108	70 - 130	06/22/22 09:54	06/22/22 15:18	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-28109/1-A

Matrix: Solid

Analysis Batch: 28093

Prep Type: Total/NA

Prep Batch: 28109

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1111		mg/Kg		111	70 - 130	
Toluene	0.100	0.09953		mg/Kg		100	70 - 130	
Ethylbenzene	0.100	0.08342		mg/Kg		83	70 - 130	
m-Xylene & p-Xylene	0.200	0.1608		mg/Kg		80	70 - 130	
o-Xylene	0.100	0.08874		mg/Kg		89	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	84	70 - 130
1,4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: LCSD 880-28109/2-A

Matrix: Solid

Analysis Batch: 28093

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 28109

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09307		mg/Kg		93	70 - 130	18	35	
Toluene	0.100	0.1074		mg/Kg		107	70 - 130	8	35	
Ethylbenzene	0.100	0.1046		mg/Kg		105	70 - 130	22	35	
m-Xylene & p-Xylene	0.200	0.2178		mg/Kg		109	70 - 130	30	35	
o-Xylene	0.100	0.1207		mg/Kg		121	70 - 130	31	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 880-16170-A-2-B MS

Matrix: Solid

Analysis Batch: 28093

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

Prep Batch: 28109

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.0998	0.08502		mg/Kg	_	85	70 - 130	
Toluene	<0.00202	U	0.0998	0.07700		mg/Kg		77	70 - 130	

 Client: Ensolum
 Job ID: 890-2432-1

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

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

Lab Sample ID: 880-16170-A-2-B MS

Matrix: Solid

Analysis Batch: 28093

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 28109

	Sample	Sample	Spike	MS	IVIS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Ethylbenzene	<0.00202	U F1	0.0998	0.06401	F1	mg/Kg		64	70 - 130
m-Xylene & p-Xylene	<0.00403	U F1	0.200	0.1238	F1	mg/Kg		62	70 - 130
o-Xylene	<0.00202	U	0.0998	0.07016		mg/Kg		70	70 - 130

	MS	MS	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	107		70 - 130

Lab Sample ID: 880-16170-A-2-C MSD

Matrix: Solid

Analysis Batch: 28093

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 28109

Sample Sample Spike MSD MSD RPD Result Qualifier Added RPD Analyte Result Qualifier %Rec Limits Limit Unit D 0.101 101 Benzene <0.00202 U 0.1023 mg/Kg 70 - 130 18 35

Surrogate	%Recovery	Qualifier	Limits						
	MSD	MSD							
o-Xylene	<0.00202	U	0.101	0.07887	mg/Kg	78	70 - 130	12	35
m-Xylene & p-Xylene	<0.00403	U F1	0.202	0.1398 F1	mg/Kg	69	70 - 130	12	35
Ethylbenzene	<0.00202	U F1	0.101	0.07376	mg/Kg	73	70 - 130	14	35
Toluene	<0.00202	U	0.101	0.08979	mg/Kg	89	70 - 130	15	35

 Surrogate
 %Recovery
 Qualifier
 Limits

 4-Bromofluorobenzene (Surr)
 90
 70 - 130

 1,4-Difluorobenzene (Surr)
 109
 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-28057/1-A

Matrix: Solid

Client Sample ID: Method Blank
Prep Type: Soluble

Analysis Batch: 28168

 Analyte
 Result Chloride
 Qualifier S.00
 RL Unit mg/Kg
 Unit mg/Kg
 D Prepared Di Prepared O6/23/22 08:39
 Analyzed Dil Fac Di Prepared O6/23/22 08:39
 D Dil Fac Di Prepared O6/23/22 08:39

Lab Sample ID: LCS 880-28057/2-A

Client Sample ID: Lab Control Sample
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 28168

Spike LCS LCS %Rec Added Analyte Result Qualifier Limits Unit %Rec Chloride 250 266.8 mg/Kg 107 90 - 110

Lab Sample ID: LCSD 880-28057/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Analysis Batch: 28168

Spike LCSD LCSD %Rec RPD Added Result Qualifier Limit Analyte Unit D %Rec Limits RPD Chloride 250 266.1 106 90 - 110 20 mg/Kg

Eurofins Carlsbad

Prep Type: Soluble

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Client: Ensolum Job ID: 890-2432-1 SDG: 03E1558053 Project/Site: PLU 21 BD 104H,123H, 124H

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-16133-A-1-E MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Soluble Analysis Batch: 28168

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Analyte Unit %Rec Limits Chloride 302 252 538.0 mg/Kg 94 90 - 110

Lab Sample ID: 880-16133-A-1-F MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 28168 Sample Sample Spike MSD MSD %Rec RPD

Result Qualifier Added Result Qualifier Limits RPD Limit Analyte Unit D %Rec Chloride 302 252 536.6 mg/Kg 93 90 - 110 0 20

QC Association Summary

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

Job ID: 890-2432-1 SDG: 03E1558053

GC VOA

Analysis Batch: 28093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	8021B	28109
MB 880-28109/5-A	Method Blank	Total/NA	Solid	8021B	28109
LCS 880-28109/1-A	Lab Control Sample	Total/NA	Solid	8021B	28109
LCSD 880-28109/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	28109
880-16170-A-2-B MS	Matrix Spike	Total/NA	Solid	8021B	28109
880-16170-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	28109

Prep Batch: 28109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	5035	
MB 880-28109/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-28109/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-28109/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-16170-A-2-B MS	Matrix Spike	Total/NA	Solid	5035	
880-16170-A-2-C MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 28261

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 28088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	8015B NM	28163

Analysis Batch: 28131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	8015 NM	

Prep Batch: 28163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Total/NA	Solid	8015NM Prep	

HPLC/IC

Leach Batch: 28057

Lab Sample ID 890-2432-1	Client Sample ID SS02	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-28057/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-28057/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-28057/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-16133-A-1-E MS	Matrix Spike	Soluble	Solid	DI Leach	
880-16133-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 28168

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2432-1	SS02	Soluble	Solid	300.0	28057
MB 880-28057/1-A	Method Blank	Soluble	Solid	300.0	28057
LCS 880-28057/2-A	Lab Control Sample	Soluble	Solid	300.0	28057
LCSD 880-28057/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	28057
880-16133-A-1-E MS	Matrix Spike	Soluble	Solid	300.0	28057

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QC Association Summary

Client: Ensolum Job ID: 890-2432-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

HPLC/IC (Continued)

Analysis Batch: 28168 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-16133-A-1-F MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	28057

Lab Chronicle

Client: Ensolum Job ID: 890-2432-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Client Sample ID: SS02 Lab Sample ID: 890-2432-1 Date Collected: 06/17/22 12:30

Matrix: Solid

Date Received: 06/17/22 16:33

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	28109	06/22/22 09:54	MR	XEN MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	28093	06/22/22 16:22	MR	XEN MID
Total/NA	Analysis	Total BTEX		1			28261	06/23/22 13:13	SM	XEN MID
Total/NA	Analysis	8015 NM		1			28131	06/22/22 11:20	SM	XEN MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.04 g	10 mL	28163 28088	06/22/22 14:48 06/22/22 21:57	DM AJ	XEN MID XEN MID
Soluble Soluble	Leach Analysis	DI Leach 300.0		10	4.95 g	50 mL	28057 28168	06/21/22 13:32 06/23/22 10:57	SC CH	XEN MID XEN MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2432-1 Project/Site: PLU 21 BD 104H,123H, 124H SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority Texas		Program		Expiration Date	
		ELAP	T104704400-21-22		
The following analytes	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	av include analytes for v	
the agency does not of	fer certification.	•	, , ,	,	
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte		
0 ,		Matrix Solid	Analyte Total TPH		

Method Summary

Client: Ensolum

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

Job ID: 890-2432-1

SDG: 03E1558053

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

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

Sample Summary

Client: Ensolum

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

Job ID: 890-2432-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2432-1	SS02	Solid	06/17/22 12:30	06/17/22 16:33	0.5'

σ ω - 1 Q Q Z O

: eurofins Environment Testing Kemco

Project Manager:

Company Name

Ensolum, LLC Ben Belill

3122 National parks Hwy

Address: Company Name Bill to: (if different)

3104 E. Green Street XTO Energy, Inc. Garrett Green

Carlsbad, NM 88220

City, State ZIP:

City, State ZIP: Address:

9898540852 Carlsbad, NM 88220

Email: bbelill@ensolum.com

Turn Around

Rush

Code

ANALYSIS REQUEST

None: NO

MeOH: Me DI Water: H₂O

Preservative Codes

roject Name:

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

EDDY COUNTY, NM 03E1558053

Due Date: ✓ Routine

Chain of Custody

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

Work Order No:

www.xenco.com Page 1_of 1_
Work Order Comments
Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐
State of Project:
Reporting: Level II
Deliverables: EDD

Revised Odle: 00/20/2020 Rev. 2020.4									
2020		6							
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		7	7/20 1637	(21/2)	P. X	ola X	mans	W	Bright Perlu
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Da	re)	Received by: (Signature)	Receive	gnature)	Relinquished by: (Signature)
	signs standard terms and conditions to circumstances beyond the control e enforced unless previously negotiated.	ice: 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 arvice. 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 curofins 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.	ny to Eurofins Xen ses or expenses in sitted to Eurofins X	lent compa for any los imple subm	hase order from cl any responsibility ye of \$5 for each s	nstitutes a valid pure nd shall not assume h project and a char	ment of samples cor ne cost of samples a till be applied to eacl	nent and relinquish I be liable only for the charge of \$85.00 w	ce: Signature of this docu srvice. Eurofins Xenco wi urofins Xenco. A minimur
	Se Ag II O	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Min Mo Ni Se	As Ba Be	KA Sb	P 6010: 8RC	TCLP / SPI	nalyzed	fetal(s) to be a	cle Method(s) and Metal(s) to be analyzed
TI Sn U V Zn	K Se A		As Ba Be B	Al Sb /	13PPM Texas 11 Al Sb	8RCRA 13PPI		200.8 / 6020:	Total 200.7 / 6010
				-					
				-					
NAPP2211151438									
NAPP2211651017,									
NAPP2210942764									
Incident Numbers:									
				-					
1666401001, 166601001									
Cost Centers: 1666351001,	Co		×	1 ×	.5' Grab/	2 12: Zio 0.5	6/17/2022	S	SS02
Sample Comments			TPH (8	# of Cont CHLO	Depth Grab/	Time [Matrix Date Sampled		Sample Identification
NaOH+Ascorbic Acid: SAPC	Za	-	015)	RIDE	0.41	Corrected Temperature:	Corrected T		tal Containers:
Zn Acetate+NaOH: Zn	ZnA	890-2432 Chain of Custody		S (E	IT, IT	e Reading:	N/A Temperature Reading:	Yes No (mple Custody Seals:
Na ₂ S ₂ O ₃ : NaSO ₃	Na ₂ O				0.0	actor:	Correction Factor	Yes No	oler Custody Seals:
NaHSO4: NABIS	NaH				JW-00-	er ID:	Thermometer ID:	(Yes) No	mples Received Intact:
H₃PO₄: HP	НзР			nete .0)	Yes No	Wet Ice:	k: Yes No	Temp Blank:	AMPLE RECEIPT
H ₂ S0 ₄ : H ₂ NaOH: Na	H ₂ S(rs	ed by 4:30pm	the lab, if received by 4.30pm			
: HC HNO ₃ : HN	HCL: HC				ay received by	TAT starts the day received by	Aulese	Grey And	
Cool: Cool MeOH: Me	Cool					Due Date:	NTY, NM	EDDY COUNTY, NM	oject Location:

T S C S S P

Sampler's Name: Project Location: Project Number:

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2432-1 SDG Number: 03E1558053

Login Number: 2432 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2432-1 SDG Number: 03E1558053

Login Number: 2432 **List Source: Eurofins Midland** List Number: 2 List Creation: 06/21/22 10:52 AM

Creator: Rodriguez, Leticia

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

<6mm (1/4").

.....LINKS

Review your project results through

EOL

Have a Question?

www.eurofinsus.com/Env

Released to Imaging: 12/13/2022 9:35:50 AM

Visit us at:



ANALYTICAL REPORT

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

Laboratory Job ID: 890-2862-1

Laboratory Sample Delivery Group: Eddy County NM

Client Project/Site: PLU 21 BD 104H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

JURAMER

Authorized for release by: 9/12/2022 9:23:18 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.

1

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4.0

Client: Ensolum
Project/Site: PLU 21 BD 104H
Laboratory Job ID: 890-2862-1
SDG: Eddy County NM

Table of Contents

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Definitions/Glossary

Job ID: 890-2862-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Qualifiers

GC VOA

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits

S1-Surrogate recovery exceeds control limits, low biased.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

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)

Estimated Detection Limit (Dioxin)

Limit of Detection (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)

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

Limit of Quantitation (DoD/DOE)

Glossary

DL, RA, RE, IN

DLC

EDL

LOD

LOQ

MCL

MDA

MDC

MDL

MPN

MOI

NC

ND

NEG

POS

PQL PRES

QC

RER

RL **RPD**

TEF **TEQ**

TNTC

ML

Abbreviation	These commonly used abbreviations may or may not be present in this report.
n	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)

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

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2862-1

SDG: Eddy County NM

Job ID: 890-2862-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2862-1

Receipt

The sample was received on 8/30/2022 4:04 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 20.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34105 and analytical batch 880-34151 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2862-1

Client Sample Results

Client: Ensolum Job ID: 890-2862-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS04

Date Collected: 08/30/22 13:30 Date Received: 08/30/22 16:04

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U F1 F2	0.00199	mg/Kg		09/09/22 12:34	09/11/22 05:56	
Toluene	< 0.00199	U F1 F2	0.00199	mg/Kg		09/09/22 12:34	09/11/22 05:56	
Ethylbenzene	< 0.00199	U F1 F2	0.00199	mg/Kg		09/09/22 12:34	09/11/22 05:56	
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.00398	mg/Kg		09/09/22 12:34	09/11/22 05:56	
o-Xylene	< 0.00199	U F1 F2	0.00199	mg/Kg		09/09/22 12:34	09/11/22 05:56	
Xylenes, Total	<0.00398	U F1 F2	0.00398	mg/Kg		09/09/22 12:34	09/11/22 05:56	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	80		70 - 130			09/09/22 12:34	09/11/22 05:56	
1,4-Difluorobenzene (Surr)	101		70 - 130			09/09/22 12:34	09/11/22 05:56	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Method: 8015 NM - Diesel Range	Organics (DR)	o) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<50.0	U	50.0	mg/Kg			09/06/22 10:41	
Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 21:43	
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 21:43	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 21:43	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	130		70 - 130			09/01/22 15:50	09/02/22 21:43	
o-Terphenyl	114		70 - 130			09/01/22 15:50	09/02/22 21:43	
Method: 300.0 - Anions, Ion Chro								
Analyte	Result 165	Qualifier	4.98 —	Unit mg/Kg	D	Prepared	Analyzed 09/08/22 14:36	Dil Fa

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Ensolum Job ID: 890-2862-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2862-1	SS04	80	101	
890-2862-1 MS	SS04	64 S1-	116	
890-2862-1 MSD	SS04	89	97	
LCS 880-34105/1-A	Lab Control Sample	83	90	
LCSD 880-34105/2-A	Lab Control Sample Dup	80	101	
MB 880-34093/5-A	Method Blank	80	123	
MB 880-34105/5-A	Method Blank	80	113	
Surrogate Legend				
BFB = 4-Bromofluorobenzene	(Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2861-A-1-C MS	Matrix Spike	119	92	
890-2861-A-1-D MSD	Matrix Spike Duplicate	121	97	
890-2862-1	SS04	130	114	
LCS 880-33565/2-A	Lab Control Sample	152 S1+	123	
LCSD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130	
MB 880-33565/1-A	Method Blank	124	117	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

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Job ID: 890-2862-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34093/5-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34093

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
I and the second								

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22 11:13	09/10/22 17:51
1,4-Difluorobenzene (Surr)	123		70 - 130	09/09/22 11:13	09/10/22 17:51

Lab Sample ID: MB 880-34105/5-A

Matrix: Solid

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34105

Dil Fac

Analysis Batch: 34151

мв мв

Analyte	Result (Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200 U	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Toluene	<0.00200 L	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Ethylbenzene	<0.00200 L	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
m-Xylene & p-Xylene	<0.00400 L	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
o-Xylene	<0.00200 L	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Xylenes, Total	<0.00400 L	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22 12:34	09/11/22 05:27	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/09/22 12:34	09/11/22 05:27	1

Lab Sample ID: LCS 880-34105/1-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34105

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08120		mg/Kg		81	70 - 130	
Toluene	0.100	0.08547		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08953		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1522		mg/Kg		76	70 - 130	
o-Xylene	0.100	0.07848		mg/Kg		78	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	83	70 - 130
1.4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid

Analysis Batch: 34151

trol Sample Dup	Client Sample ID: Lab Cont		
p Type: Total/NA	Prep		
rep Batch: 34105	Pre		
DDD	0/ D	1000 1000	0

Spike **RPD** LCSD LCSD %Rec Result Qualifier Analyte Added Unit %Rec Limits RPD Limit Benzene 0.100 0.1089 mg/Kg 109 70 - 130 29 35

Client: Ensolum Job ID: 890-2862-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-34105/2-A **Matrix: Solid**

Analysis Batch: 34151

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34105

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09966		mg/Kg		100	70 - 130	15	35
Ethylbenzene	0.100	0.09820		mg/Kg		98	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130	12	35
o-Xylene	0.100	0.08621		mg/Kg		86	70 - 130	9	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2862-1 MS

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: SS04 Prep Type: Total/NA

Prep Batch: 34105

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1 F2	0.0998	0.03691	F1	mg/Kg		37	70 - 130	
Toluene	<0.00199	U F1 F2	0.0998	0.03406	F1	mg/Kg		34	70 - 130	
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.02475	F1	mg/Kg		25	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.03414	F1	mg/Kg		17	70 - 130	
o-Xylene	<0.00199	U F1 F2	0.0998	0.01758	F1	mg/Kg		18	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130		
1,4-Difluorobenzene (Surr)	116		70 - 130		

Lab Sample ID: 890-2862-1 MSD

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: SS04

Prep Type: Total/NA

Prep Batch: 34105

Timely Cit Date:											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1 F2	0.100	0.07171	F2	mg/Kg		71	70 - 130	64	35
Toluene	<0.00199	U F1 F2	0.100	0.07701	F2	mg/Kg		77	70 - 130	77	35
Ethylbenzene	<0.00199	U F1 F2	0.100	0.07436	F2	mg/Kg		74	70 - 130	100	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.201	0.1307	F1 F2	mg/Kg		65	70 - 130	117	35
o-Xylene	<0.00199	U F1 F2	0.100	0.06968	F1 F2	mg/Kg		69	70 - 130	119	35

MSD MSD

Surrogate	76Kecovery	Qualifier	LIIIIII
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-33565/1-A

Matrix: Solid

Analysis Batch: 33582

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

Prep Batch: 33565

Gasoline Range Organics

мв мв

Result Qualifier <50.0 U

50.0

Unit mg/Kg

Prepared 09/01/22 15:50

09/02/22 19:12

(GRO)-C6-C10

Job ID: 890-2862-1

Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: MB 880-33565/1-A	Client Sample ID: Method Blank
Matrix: Solid	Prep Type: Total/NA
Analysis Batch: 33582	Prep Batch: 33565
MP MP	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
	МВ	MB						
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130			09/01/22 15:50	09/02/22 19:12	1
o-Terphenyl	117		70 - 130			09/01/22 15:50	09/02/22 19:12	1

Lab Sample ID: LCS 880-33 Matrix: Solid Analysis Batch: 33582					Client	Sample	ID: Lab Control Samp Prep Type: Total/l Prep Batch: 335		
Analysis Butch. 00002			Spike	LCS	LCS				%Rec
Analyte			Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10			1000	846.8		mg/Kg		85	70 - 130
Diesel Range Organics (Over			1000	876.5		mg/Kg		88	70 - 130
C10-C28)									
	LCS	LCS							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	152	S1+	70 - 130						
o-Terphenyl	123		70 - 130						

Lab Sample ID: LCSD 880-33565/3-A			Client Sample ID: Lab Control S	ample Dup
Matrix: Solid			Prep Typ	e: Total/NA
Analysis Batch: 33582			Prep Ba	atch: 33565
	Spike	LCSD LCSD	%Rec	RPD

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	858.2		mg/Kg		86	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	909.9		mg/Kg		91	70 - 130	4	20
C10-C28)									

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	156	S1+	70 - 130
o-Terphenyl	130		70 - 130

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Lab Sample ID: 890-2861-A-1-C MS	Client Sample ID: Matrix Spike
Matrix: Solid	Prep Type: Total/NA

Matrix: Solid				Prep Type: Total/NA
Analysis Batch: 33582				Prep Batch: 33565
	Sample Sample	Spike	MS MS	%Rec

•	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	989.5		mg/Kg		99	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	999	1046		mg/Kg		105	70 - 130	
	MS	MS								
Surrogate	%Recovery	Qualifier	Limits							
1-Chlorooctane			70 - 130							

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70 - 130

o-Terphenyl

Lab Sample ID: 890-2861-A-1-D MSD

Job ID: 890-2862-1

Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 33565

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	998	1037		mg/Kg		104	70 - 130	5	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	998	1069		mg/Kg		107	70 - 130	2	20

C10-C28)

Matrix: Solid

Analysis Batch: 33582

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	121		70 - 130
o-Terphenyl	97		70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33552/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble

Analysis Batch: 33925

мв мв

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/08/22 12:35	1

Lab Sample ID: LCS 880-33552/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33925

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.9	-	mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-33552/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33925

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	252.8		mg/Kg		101	90 - 110	0	20	

Lab Sample ID: 880-18647-A-35-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.9		251	282.5		ma/Ka		100	90 110	

Lab Sample ID: 880-18647-A-35-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 33925

Alialysis Datell. 33323											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	30.9		251	282.1		mg/Kg		100	90 - 110	0	20

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Prep Type: Soluble

QC Association Summary

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

Job ID: 890-2862-1 SDG: Eddy County NM

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GC VOA

Prep Batch: 34093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34093/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2862-1	SS04	Total/NA	Solid	5035	
MB 880-34105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2862-1 MS	SS04	Total/NA	Solid	5035	
890-2862-1 MSD	SS04	Total/NA	Solid	5035	

Analysis Batch: 34151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Total/NA	Solid	8021B	34105
MB 880-34093/5-A	Method Blank	Total/NA	Solid	8021B	34093
MB 880-34105/5-A	Method Blank	Total/NA	Solid	8021B	34105
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	8021B	34105
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34105
890-2862-1 MS	SS04	Total/NA	Solid	8021B	34105
890-2862-1 MSD	SS04	Total/NA	Solid	8021B	34105

Analysis Batch: 34255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Total/NA	Solid	8015NM Prep	
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Total/NA	Solid	8015B NM	33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33829

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2862-1

SDG: Eddy County NM

HPLC/IC

Leach Batch: 33552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Soluble	Solid	DI Leach	
MB 880-33552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2862-1	SS04	Soluble	Solid	300.0	33552
MB 880-33552/1-A	Method Blank	Soluble	Solid	300.0	33552
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	300.0	33552
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33552
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	300.0	33552
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33552

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Lab Chronicle

Client: Ensolum Job ID: 890-2862-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS04

Lab Sample ID: 890-2862-1

Matrix: Solid

Date Collected: 08/30/22 13:30 Date Received: 08/30/22 16:04

	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	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 05:56	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34255	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33829	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 21:43	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	33552	09/01/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33925	09/08/22 14:36	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

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Accreditation/Certification Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas		ELAP T104704400-22-24		06-30-23	
The following analytes	are included in this report, bu	It the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for	
the agency does not of	fer certification.	•	, , ,	·, ·····	
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	,	
0 ,		Matrix Solid	Analyte Total TPH		

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2862-1

SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2862-1

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2862-1	SS04	Solid	08/30/22 13:30	08/30/22 16:04	0.5'

service. Eurofins Xenco will be I Eurofins Xenco. A minimum cha

Relipquished by: (Sigra:

tice: Signature of this documer

Circle Method(s) and Metal

Total 200.7 / 6010

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eurofins Bill to: (if different)

Chain of Custody

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

Work Order No:

None: NO DI Water: H ₂ O	
Preservative Codes	EQUEST
Other:	Deliverables: EDD
/UST TRRP Level IV	Reporting: Level II Level III PST/UST TRRP Level IV
	State of Project:
ifields 🗌 RRC 📗 Superfund 🗎	Program: UST/PST 🗌 PRP 📗 Brownfields 📗 RRC 🗎 Superfund 📗
omments	Work Order Comments
Page1_ of1_	www.xenco.com

		2	130 (160	81301	tode	To X	porono	
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Dat	re)	Received by: (Signature)	Receiv	ure)
	tandard terms and conditions :umstances beyond the control roed unless previously negotiated.	nd relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions bie 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 bie 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 bie only for the cost of samples and shall not asset of the sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiate	y to Eurofins Xe les or expenses itted to Eurofins	lent compar for any loss ample subm	chase order from c any responsibility ge of \$5 for each s	nstitutes a valid pur and shall not assum h project and a char	hment of samples co the cost of samples a will be applied to eac	nd relinquis ble only for pe of \$85.00
4/0 / /4/1	g TI U Hg: 1631 / 245.1 / /4/0 / /4/1	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	As Ba Be	:RA Sb	LP 6010: 8RC	TCLP / SP	s) to be analyzed	s) to be
Sn ∪ ∨ Zn	K Se Ag S	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni	s Ba Be B	Al Sb As Ba	M Texas 11	8RCRA 13PPM Texas 11		0.8 / 6020:
ALCONOMINATION OF THE PROPERTY				-				
Incident Number:	Inc							
				_				
				-				
Cost Center: 1666351001	Cost C		>	>	U.5 Grab/	1350	8/30/2022	U
			+	Т	2	177	1	
Sample Comments	San		TPH (8	CHLOF	Depth Grab/	Time Sampled	Matrix Date Sampled	-
NaOH+Ascorbic Acid: SAPC	NaOH+As		-	RIDE	7014	Corrected Temperature:	Corrected	
Zn Acetate+NaOH: Zn	Zn Acetat	890-2862 Chaire		S (E	9:0	re Reading:	N/A Temperature Reading	es No
NaSO ₃	Na ₂ S ₂ O ₃ : NaSO ₃	Coco Chain of Custody			60	Factor:	N/A Correction Factor	es No/
NABIS	NaHSO₄: NABIS				100 m	ter ID:	No Thermometer ID:	Yes N
ס	H₃PO₄: HP			nete .0)	Yes No	Wet Ice:	nk: (Year No	Temp Blank:
2 NaOH: Na	H ₂ S0 ₄ : H ₂			rs	the lab, if received by 4:30pm	the lab, if recei		
HNO ₃ : HN	HCL: HC				TAT starts the day received by	TAT starts the	KASE PARKER	KASE F

Samples Received Intact: SAMPLE RECEIPT

ooler Custody Seals:

ample Custody Seals:

Sample Identification SS04

Sampler's Name:

oject Location:

EDDY COUNTY, NM

Due Date:

✓ Routine

Rush

Pres.

ANALYSIS R

Cool: Cool

MeOH: Me

Turn Around

Project Number:

oject Name:

PLU 21 BD 104H

03E1558053

Phone

9898540852 Carlsbad, NM 88220 3122 National parks Hwy

Email: bbelilt@ensolum.com

City, State ZIP:

Carlsbad, NM 88220 3104 E. Green Street XTO Energy, Inc. Garrett Green

Company Name

Address:

ity, State ZIP

Company Name: Project Manager:

Ensolum, LLC

Ben Belill

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2862-1

SDG Number: Eddy County NM

List Source: Eurofins Carlsbad

Login Number: 2862 List Number: 1

Creator: Stutzman, Amanda

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

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2862-1 SDG Number: Eddy County NM

List Source: Eurofins Midland

Login Number: 2862 List Number: 2 List Creation: 09/01/22 11:10 AM

Creator: Rodriguez, Leticia

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

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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: 890-2863-1

Laboratory Sample Delivery Group: Eddy County

Client Project/Site: PLU 21 BD 104H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:23:18 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H
Laboratory Job ID: 890-2863-1
SDG: Eddy County

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Definitions/Glossary

Job ID: 890-2863-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County

Qualifiers

GC VOA Qualifier

Qualifier Description F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits S1-

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

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDC Minimum Detectable Concentration (Radiochemistry)

Method Detection Limit

ML Minimum Level (Dioxin) MPN Most Probable Number MOI Method Quantitation Limit

NC Not Calculated

MDL

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2863-1

SDG: Eddy County

Job ID: 890-2863-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2863-1

Receipt

The samples were received on 8/30/2022 4:04 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 20.4° C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34105 and analytical batch 880-34151 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: PH01 (890-2863-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

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Matrix: Solid

Lab Sample ID: 890-2863-1

Client Sample Results

Client: Ensolum Job ID: 890-2863-1
Project/Site: PLU 21 BD 104H SDG: Eddy County

Client Sample ID: PH01

Date Collected: 08/30/22 09:20 Date Received: 08/30/22 16:04

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 06:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			09/09/22 12:34	09/11/22 06:16	1
1,4-Difluorobenzene (Surr)	110		70 - 130			09/09/22 12:34	09/11/22 06:16	1
Method: Total BTEX - Total BTE	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/12/22 10:03	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/06/22 10:41	
-							********	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						1
	• •	RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics	• •	Qualifier	RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared 09/01/22 15:50		
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier U			<u>D</u>	<u>.</u>	Analyzed	1
Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9	Qualifier U	49.9	mg/Kg	<u>D</u>	09/01/22 15:50	Analyzed 09/02/22 22:05	1
,	Result <49.9 <49.9	Qualifier U U U	49.9	mg/Kg	<u> </u>	09/01/22 15:50 09/01/22 15:50	Analyzed 09/02/22 22:05	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate	Result <49.9 <49.9 <49.9	Qualifier U U Qualifier	49.9 49.9 49.9	mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50	Analyzed 09/02/22 22:05 09/02/22 22:05 09/02/22 22:05	1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 <49.9 <49.9 <49.9 %Recovery	Qualifier U U Qualifier	49.9 49.9 49.9 <i>Limits</i>	mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared	Analyzed 09/02/22 22:05 09/02/22 22:05 09/02/22 22:05 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier U U Qualifier S1+	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared 09/01/22 15:50	Analyzed 09/02/22 22:05 09/02/22 22:05 09/02/22 22:05 Analyzed 09/02/22 22:05	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier U U Qualifier S1+	49.9 49.9 49.9 Limits 70 - 130	mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared 09/01/22 15:50	Analyzed 09/02/22 22:05 09/02/22 22:05 09/02/22 22:05 Analyzed 09/02/22 22:05	1

Client Sample ID: PH02 Lab Sample ID: 890-2863-2

Date Collected: 08/30/22 09:30 Date Received: 08/30/22 16:04

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 06:37	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130			09/09/22 12:34	09/11/22 06:37	1

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Matrix: Solid

Client: Ensolum Job ID: 890-2863-1 Project/Site: PLU 21 BD 104H SDG: Eddy County

Client Sample ID: PH02 Lab Sample ID: 890-2863-2

Date Collected: 08/30/22 09:30 Matrix: Solid Date Received: 08/30/22 16:04

Sample Depth: 1'

Method: 8021B - Volatile O	rganic Compou	nds (GC)	(Continued)
Michiga: OUL 1B Volume C	i gaino compou	1145 (55)	(Goillinaca)

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	101	70 - 130	09/09/22 12:34	09/11/22 06:37	1

Method: Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 10:03	1

BARALRA IL COAT NIBA	Discol Dance	O	(DDO) (CC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9 U	49.9	mg/Kg			09/06/22 10:41	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 22:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 22:26	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 22:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prep	ared	Analyzed	DII Fac
1-Chlorooctane	112		70 - 130	09/01/2	2 15:50	09/02/22 22:26	1
o-Terphenyl	102		70 - 130	09/01/2	2 15:50	09/02/22 22:26	1

Method: 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	66.3	5.02	mg/Kg			09/08/22 14:46	1

Client Sample ID: PH03 Lab Sample ID: 890-2863-3 **Matrix: Solid**

Date Collected: 08/30/22 09:40 Date Received: 08/30/22 16:04

Sample Depth: 1'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/09/22 12:34	09/11/22 06:57	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	41	S1-	70 - 130			09/09/22 12:34	09/11/22 06:57	1
1,4-Difluorobenzene (Surr)	109		70 - 130			09/09/22 12:34	09/11/22 06:57	1

Mothod:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00396	U	0.00396	ma/Ka			09/12/22 10:03	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/06/22 10:41	1

Matrix: Solid

Lab Sample ID: 890-2863-3

Client Sample Results

Client: Ensolum Job ID: 890-2863-1
Project/Site: PLU 21 BD 104H SDG: Eddy County

Client Sample ID: PH03

Date Collected: 08/30/22 09:40 Date Received: 08/30/22 16:04

Sample Depth: 1'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 22:48	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 22:48	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 22:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	127		70 - 130			09/01/22 15:50	09/02/22 22:48	1
o-Terphenyl	114		70 - 130			09/01/22 15:50	09/02/22 22:48	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

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Surrogate Summary

Client: Ensolum Job ID: 890-2863-1 Project/Site: PLU 21 BD 104H SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
390-2862-A-1-D MS	Matrix Spike	64 S1-	116	
390-2862-A-1-E MSD	Matrix Spike Duplicate	89	97	
390-2863-1	PH01	77	110	
390-2863-2	PH02	79	101	
390-2863-3	PH03	41 S1-	109	
CS 880-34105/1-A	Lab Control Sample	83	90	
CSD 880-34105/2-A	Lab Control Sample Dup	80	101	
MB 880-34093/5-A	Method Blank	80	123	
MB 880-34105/5-A	Method Blank	80	113	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				Percent Surrogate Recovery (Acceptance Limits
		1CO1	OTPH1	
b Sample ID	Client Sample ID	(70-130)	(70-130)	
-2861-A-1-C MS	Matrix Spike	119	92	
0-2861-A-1-D MSD	Matrix Spike Duplicate	121	97	
0-2863-1	PH01	138 S1+	123	
0-2863-2	PH02	112	102	
0-2863-3	PH03	127	114	
S 880-33565/2-A	Lab Control Sample	152 S1+	123	
SD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130	
3 880-33565/1-A	Method Blank	124	117	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum

Job ID: 890-2863-1

SDG: Eddy County

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34093/5-A

Analysis Batch: 34151

Matrix: Solid

Project/Site: PLU 21 BD 104H

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34093

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22 11:13	09/10/22 17:51
1,4-Difluorobenzene (Surr)	123		70 - 130	09/09/22 11:13	09/10/22 17:51

Client Sample ID: Method Blank

Analyzed

Prep Type: Total/NA Prep Batch: 34105

Dil Fac

Analysis Batch: 34151

Matrix: Solid

Lab Sample ID: MB 880-34105/5-A

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepa	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22	2 12:34	09/11/22 05:27	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/09/22	2 12:34	09/11/22 05:27	1

Lab Sample ID: LCS 880-34105/1-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 34105

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08120		mg/Kg		81	70 - 130	
Toluene	0.100	0.08547		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08953		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1522		mg/Kg		76	70 - 130	
o-Xylene	0.100	0.07848		mg/Kg		78	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifie	er Limits
4-Bromofluorobenzene (Surr)	83	70 - 130
1.4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID	: Lab Control	Sample Dup
	Dean To	mar Tatal/NIA

Prep Type: Total/NA

Prep Batch: 34105

	Spike	LCSD LCSD				70Rec		KFD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1089	mg/Kg		109	70 - 130	29	35

LCCD LCCD

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Client: Ensolum Project/Site: PLU 21 BD 104H Job ID: 890-2863-1

SDG: Eddy County

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

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34105

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Toluene	0.100	0.09966		mg/Kg		100	70 - 130	15	35
Ethylbenzene	0.100	0.09820		mg/Kg		98	70 - 130	9	35
m-Xylene & p-Xylene	0.200	0.1717		mg/Kg		86	70 - 130	12	35
o-Xylene	0.100	0.08621		mg/Kg		86	70 - 130	9	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2862-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 34151

Prep Type: Total/NA

Prep Batch: 34105

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U F1 F2	0.0998	0.03691	F1	mg/Kg		37	70 - 130	
Toluene	<0.00199	U F1 F2	0.0998	0.03406	F1	mg/Kg		34	70 - 130	
Ethylbenzene	<0.00199	U F1 F2	0.0998	0.02475	F1	mg/Kg		25	70 - 130	
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.200	0.03414	F1	mg/Kg		17	70 - 130	
o-Xylene	<0.00199	U F1 F2	0.0998	0.01758	F1	mg/Kg		18	70 - 130	

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130
1,4-Difluorobenzene (Surr)	116		70 - 130

Lab Sample ID: 890-2862-A-1-E MSD

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34105

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00199	U F1 F2	0.100	0.07171	F2	mg/Kg		71	70 - 130	64	35
Toluene	<0.00199	U F1 F2	0.100	0.07701	F2	mg/Kg		77	70 - 130	77	35
Ethylbenzene	< 0.00199	U F1 F2	0.100	0.07436	F2	mg/Kg		74	70 - 130	100	35
m-Xylene & p-Xylene	<0.00398	U F1 F2	0.201	0.1307	F1 F2	mg/Kg		65	70 - 130	117	35
o-Xylene	<0.00199	U F1 F2	0.100	0.06968	F1 F2	mg/Kg		69	70 - 130	119	35

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-33565/1-A

Matrix: Solid

Analysis Batch: 33582

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

Prep Batch: 33565

	MB	МВ						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
(GRO)-C6-C10								

Client: Ensolum

Job ID: 890-2863-1

SDG: Eddy County

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

Lab Sample ID: MB 880-33565/1-A **Matrix: Solid**

Analysis Batch: 33582

Project/Site: PLU 21 BD 104H

MR MR

Client Sample ID: Method Blank

Prep Type: Total/NA Prep Batch: 33565

	IND	MID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	124		70 - 130	09/01/22 15:50	09/02/22 19:12	1
o-Terphenyl	117		70 - 130	09/01/22 15:50	09/02/22 19:12	1

Client Sample ID: Lab Control Sample

Lab Sample ID: LCS 880-33565/2-A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33582 Prep Batch: 33565

LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 846.8 85 70 - 130 mg/Kg (GRO)-C6-C10 1000 876.5 Diesel Range Organics (Over mg/Kg 88 70 - 130

C10-C28)

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 152 S1+ 70 - 130 o-Terphenyl 123 70 - 130

Lab Sample ID: LCSD 880-33565/3-A

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Lab	Control Sample Dup
-----------------------	---------------------------

Prep Type: Total/NA

Prep Batch: 33565

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	858.2		mg/Kg		86	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	909.9		mg/Kg		91	70 - 130	4	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 156 S1+ 70 - 130 o-Terphenyl 130 70 - 130

Lab Sample ID: 890-2861-A-1-C MS

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Matrix Spike

Prep Type: Total/NA Prep Batch: 33565

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	989.5		mg/Kg		99	70 - 130	
Diesel Range Organics (Over	<49.9	U	999	1046		mg/Kg		105	70 - 130	

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	92		70 - 130

Client: Ensolum Job ID: 890-2863-1 Project/Site: PLU 21 BD 104H SDG: Eddy County

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

Lab Sample ID: 890-2861-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 33582 Prep Type: Total/NA Prep Batch: 33565

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	998	1037		mg/Kg		104	70 - 130	5	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	998	1069		mg/Kg		107	70 - 130	2	20
C10-C28)											

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 121 o-Terphenyl 97 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33552/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/08/22 12:35	1

Lab Sample ID: LCS 880-33552/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33925

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	251.9		mg/Kg		101	90 - 110	

Lab Sample ID: LCSD 880-33552/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	252.8		ma/Ka		101	90 _ 110		20

Lab Sample ID: 880-18647-A-35-C MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	30.9		251	282 5		ma/Ka		100	90 110	

Client Sample ID: Matrix Spike Duplicate Lab Sample ID: 880-18647-A-35-D MSD

Matrix: Solid

Analysis Ratch: 33925

Alialysis Datcii. 33323											
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	30.9		251	282.1		mg/Kg		100	90 - 110		20

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Prep Type: Soluble

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2863-1 SDG: Eddy County

GC VOA

Prep Batch: 34093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34093/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	5035	
890-2863-2	PH02	Total/NA	Solid	5035	
890-2863-3	PH03	Total/NA	Solid	5035	
MB 880-34105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	8021B	34105
890-2863-2	PH02	Total/NA	Solid	8021B	34105
890-2863-3	PH03	Total/NA	Solid	8021B	34105
MB 880-34093/5-A	Method Blank	Total/NA	Solid	8021B	34093
MB 880-34105/5-A	Method Blank	Total/NA	Solid	8021B	34105
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	8021B	34105
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34105
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	34105
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34105

Analysis Batch: 34256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	Total BTEX	
890-2863-2	PH02	Total/NA	Solid	Total BTEX	
890-2863-3	PH03	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	8015NM Prep	
890-2863-2	PH02	Total/NA	Solid	8015NM Prep	
890-2863-3	PH03	Total/NA	Solid	8015NM Prep	
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	8015B NM	33565
890-2863-2	PH02	Total/NA	Solid	8015B NM	33565
890-2863-3	PH03	Total/NA	Solid	8015B NM	33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565

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QC Association Summary

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

Job ID: 890-2863-1 SDG: Eddy County

GC Semi VOA (Continued)

Analysis Batch: 33582 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33830

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Total/NA	Solid	8015 NM	
890-2863-2	PH02	Total/NA	Solid	8015 NM	
890-2863-3	PH03	Total/NA	Solid	8015 NM	

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Leach Batch: 33552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Soluble	Solid	DI Leach	_
890-2863-2	PH02	Soluble	Solid	DI Leach	
890-2863-3	PH03	Soluble	Solid	DI Leach	
MB 880-33552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2863-1	PH01	Soluble	Solid	300.0	33552
890-2863-2	PH02	Soluble	Solid	300.0	33552
890-2863-3	PH03	Soluble	Solid	300.0	33552
MB 880-33552/1-A	Method Blank	Soluble	Solid	300.0	33552
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	300.0	33552
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33552
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	300.0	33552
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33552

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Released to Imaging: 12/13/2022 9:35:50 AM

Project/Site: PLU 21 BD 104H **Client Sample ID: PH01**

Client: Ensolum

Lab Sample ID: 890-2863-1

Matrix: Solid

Date Collected: 08/30/22 09:20 Date Received: 08/30/22 16:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 06:16	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34256	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33830	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 22:05	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33552	09/01/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33925	09/08/22 14:41	CH	EET MID

Client Sample ID: PH02 Lab Sample ID: 890-2863-2 Matrix: Solid

Date Collected: 08/30/22 09:30 Date Received: 08/30/22 16:04

	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	34105	09/09/22 12:34	MR	EET MIC
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 06:37	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34256	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33830	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 22:26	SM	EET MIC
Soluble	Leach	DI Leach			4.98 g	50 mL	33552	09/01/22 13:14	SMC	EET MIC
Soluble	Analysis	300.0		1	50 mL	50 mL	33925	09/08/22 14:46	CH	EET MID

Client Sample ID: PH03 Lab Sample ID: 890-2863-3

Date Collected: 08/30/22 09:40 **Matrix: Solid** Date Received: 08/30/22 16:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 06:57	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34256	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33830	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 22:48	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	33552	09/01/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33925	09/08/22 14:51	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2863-1 Project/Site: PLU 21 BD 104H

SDG: Eddy County

Laboratory: Eurofins Midland

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

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

the agency does not offer certification.

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

Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2863-1

SDG: Eddy County

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

Released to Imaging: 12/13/2022 9:35:50 AM

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2863-1

SDG: Eddy County

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	
890-2863-1	PH01	Solid	08/30/22 09:20	08/30/22 16:04	1
890-2863-2	PH02	Solid	08/30/22 09:30	08/30/22 16:04	1'
890-2863-3	PH03	Solid	08/30/22 09:40	08/30/22 16:04	1'

Circle Method(s) and Metal(s) to be analyzed

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al

Sb As Ba

Be B

ဂ္ဂ င္ပ Cr Co

Cu Fe Pb Mg Mn Mo Ni K

Se

Ag SiO₂ Na Sr Ti Sn U V Zn Hg: 1631 / 245.1 / 7470

17471

NAPP221084276 Incident Number:

Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U

TCLP / SPLP 6010: 8RCRA

eurofins

13 14

Chain of Custody

Midland, TX (432) 704-5440. San Antonio, TX (210) 509-3334 EL Paso, TX (915) Hobbs, NM (575) Houston, TX (281) 240-4200, Dallas, TX (214) 902-0300

Work Order No:

Preservative Codes	UEST	ANALYSIS REQUEST
ADaPT Other:	Deliverables: EDD	
T/UST TRRP Level IV	_	risbad, NM 88220
1	State of Project:	04 E. Green Street
nfields 🗌 RRC 🔲 Superfund 📋	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund [O Energy. Inc.
Comments	Work Order Comments	rrett Green
Page1_ of1_	www.xenco.com	392-7550, Carlsbad, NM (575) 988-3199
) 383-3443, EUDDOCK, 17 (000) 784-1280

		6			5
		4		0	ω
			160 Jes 18	Andreada Stut 8/30/201604	, mount
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Refinquished by: (Signature)

NaOH+Ascorbic Acid: SAPC

Sample Comments

Cost Center: 1666351001

Zn Acetate+NaOH: Zn Na₂S₂O₃ NaSO₃ NaHSO₄: NABIS H3PO4: HP

SAMPLE RECEIPT

Samples Received Intact:

Yes No

Correction Factor:

Thermometer ID:

200

CHLORIDES (EPA: 300.0)

890-2863 Chain of Custody

(res/ No

Wet Ice:

Ked

S O

Parameters

Yes No

NA

Corrected Temperature: Temperature Reading:

Sample Custody Seals: Cooler Custody Seals:

Sample Identification

Matrix

Sampled

Time

Depth

Comp Grab/

Cont # 0

TPH (8015)

BTEX (8021

Date

PH02 PH01

PH03

S

8/30/2022 0940

Grab/ Grab/ Grab/

×

× × ×

8/30/2022 8/30/2022

0930 0920 Sampler's Name:

Project Location: Project Number: Project Name:

EDDY COUNTY, NM KASE PARKER

Due Date:

Cool: Cool H₂SO₄: H₂

HNO₃: HN NaOH: Na MeOH: Me DI Water: H₂O

None: NO

✓ Routine

Rush

Turn Around

Email: bbelil@ensolum

City, State ZIP:

Company Name: Bill to: (if different)

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

PLU 21 BD 104H 03E1558053

Phone:

ity, State ZIP:

Carlsbad, NM 88220 3122 National parks Hwy Project Manager:

Ben Belill

Company Name

Ensolum, LLC

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2863-1 SDG Number: Eddy County

Login Number: 2863 List Source: Eurofins Carlsbad

List Number: 1

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2863-1 SDG Number: Eddy County

List Source: Eurofins Midland

Login Number: 2863 List Number: 2 List Creation: 09/01/22 11:10 AM

Creator: Rodriguez, Leticia

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



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2864-1

Laboratory Sample Delivery Group: Eddy County NM

Client Project/Site: PLU 21 BD 104H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

SCRAMER

Authorized for release by: 9/12/2022 9:24:15 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

Received by OCD: 9/21/2022 2:44:22 PM

Review your project results through

Have a Question?



Visit us at:

www.eurofinsus.com/Env

Released to Imaging: 12/13/2022 9:35:50 AM

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H
Laboratory Job ID: 890-2864-1
SDG: Eddy County NM

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Definitions/Glossary

Job ID: 890-2864-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Qualifiers

GC VOA

Qualifier **Qualifier Description** F1 MS and/or MSD recovery exceeds control limits. F2 MS/MSD RPD exceeds control limits

S1-Surrogate recovery exceeds control limits, low biased.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description** S1+ Surrogate recovery exceeds control limits, high biased.

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

MDL Method Detection Limit ML Minimum Level (Dioxin)

MPN Most Probable Number MOI Method Quantitation Limit

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

Practical Quantitation Limit PQL

PRES Presumptive **Quality Control** QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2864-1

SDG: Eddy County NM

Job ID: 890-2864-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2864-1

Receipt

The sample was received on 8/30/2022 4:04 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 20.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34105 and analytical batch 880-34151 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2864-1

Client Sample Results

Client: Ensolum Job ID: 890-2864-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS05

Date Collected: 08/30/22 13:35 Date Received: 08/30/22 16:04

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
Toluene	<0.00201	U	0.00201	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		09/09/22 12:34	09/11/22 07:18	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	79		70 - 130			09/09/22 12:34	09/11/22 07:18	1
1,4-Difluorobenzene (Surr)	100		70 - 130			09/09/22 12:34	09/11/22 07:18	1
- Method: Total BTEX - Total BTE)	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/12/22 10:03	1
Analyte Total TPH		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
lotal LPH				" .			00/00/00 10 11	
-	\ 30.0	U	50.0	mg/Kg			09/06/22 10:41	1
• •			50.0	mg/Kg			09/06/22 10:41	1
: Method: 8015B NM - Diesel Ranç	ge Organics (D		50.0 RL	mg/Kg Unit	D	Prepared	09/06/22 10:41 Analyzed	1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 09/01/22 15:50		·
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (Di	RO) (GC) Qualifier	RL	Unit	<u>D</u>	<u>.</u>	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (Di Result <50.0	RO) (GC) Qualifier U	RL 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	09/01/22 15:50	Analyzed 09/02/22 23:09	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DI Result <50.0	RO) (GC) Qualifier U	RL 50.0	<mark>Unit</mark> mg/Kg mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50	Analyzed 09/02/22 23:09 09/02/22 23:09	
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (D) Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	<mark>Unit</mark> mg/Kg mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50	Analyzed 09/02/22 23:09 09/02/22 23:09 09/02/22 23:09	Dil Fac 1 1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	ge Organics (D) Result <50.0 <50.0 <80.0 **Recovery**	RO) (GC) Qualifier U	#L 50.0 50.0 50.0 Limits	<mark>Unit</mark> mg/Kg mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared	Analyzed 09/02/22 23:09 09/02/22 23:09 09/02/22 23:09 Analyzed	Dil Fac 1 1 1 Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	ge Organics (D) Result <50.0 <50.0 <50.0 <50.0 %Recovery 113 101	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	<mark>Unit</mark> mg/Kg mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared 09/01/22 15:50	Analyzed 09/02/22 23:09 09/02/22 23:09 09/02/22 23:09 Analyzed 09/02/22 23:09	Dil Fac 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	ge Organics (D) Result <50.0 <50.0 <50.0 **Recovery 113 101 comatography -	RO) (GC) Qualifier U U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	<mark>Unit</mark> mg/Kg mg/Kg	<u>D</u>	09/01/22 15:50 09/01/22 15:50 09/01/22 15:50 Prepared 09/01/22 15:50	Analyzed 09/02/22 23:09 09/02/22 23:09 09/02/22 23:09 Analyzed 09/02/22 23:09	Dil Fac 1 1 1 Dil Fac 1

DFBZ = 1,4-Difluorobenzene (Surr)

Surrogate Summary

Client: Ensolum Job ID: 890-2864-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2862-A-1-D MS	Matrix Spike	64 S1-	116	
890-2862-A-1-E MSD	Matrix Spike Duplicate	89	97	
890-2864-1	SS05	79	100	
LCS 880-34105/1-A	Lab Control Sample	83	90	
LCSD 880-34105/2-A	Lab Control Sample Dup	80	101	
MB 880-34093/5-A	Method Blank	80	123	
MB 880-34105/5-A	Method Blank	80	113	
Surrogate Legend				

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2861-A-1-C MS	Matrix Spike	119	92	
890-2861-A-1-D MSD	Matrix Spike Duplicate	121	97	
890-2864-1	SS05	113	101	
LCS 880-33565/2-A	Lab Control Sample	152 S1+	123	
LCSD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130	
MB 880-33565/1-A	Method Blank	124	117	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Eurofins Carlsbad

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Job ID: 890-2864-1

Client: Ensolum SDG: Eddy County NM Project/Site: PLU 21 BD 104H

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34093/5-A

Analysis Batch: 34151

Matrix: Solid

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

Prep Batch: 34093

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1

мв мв

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80	70 - 130	09/09/22 11:13	09/10/22 17:51	1
1.4-Difluorobenzene (Surr)	123	70 - 130	09/09/22 11:13	09/10/22 17:51	1

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

Prep Batch: 34105

Matrix: Solid **Analysis Batch: 34151**

Lab Sample ID: MB 880-34105/5-A

	INID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22	12:34	09/11/22 05:27	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/09/22	12:34	09/11/22 05:27	1

Lab Sample ID: LCS 880-34105/1-A

Matrix: Solid

Analysis Batch: 34151

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

Client Sample ID: Lab Control Sample Dup

Prep Batch: 34105

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08120		mg/Kg		81	70 - 130	
Toluene	0.100	0.08547		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08953		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1522		mg/Kg		76	70 - 130	
o-Xylene	0.100	0.07848		mg/Kg		78	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	83	70 - 130
1.4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid							Prep 7	Type: To	tal/NA
Analysis Batch: 34151							Prep	Batch:	34105
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1089	-	ma/Ka		109	70 130	29	35

QC Sample Results

Job ID: 890-2864-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid Analysis Batch: 34151 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34105

Limit
35
35
35
35
15 9 12

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2862-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA Analysis Batch: 34151 Prep Batch: 34105 MS MS %Rec

Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Benzene 0.0998 0.03691 F1 37 <0.00199 U F1 F2 mg/Kg 70 - 130 Toluene <0.00199 UF1F2 0.0998 0.03406 F1 34 70 - 130 mg/Kg Ethylbenzene 0.0998 0.02475 F1 25 70 - 130 <0.00199 U F1 F2 mg/Kg m-Xylene & p-Xylene <0.00398 U F1 F2 0.200 0.03414 F1 17 70 - 130 mg/Kg o-Xylene <0.00199 UF1F2 0.0998 0.01758 F1 mg/Kg 18 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits	
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130	
1,4-Difluorobenzene (Surr)	116		70 - 130	

Lab Sample ID: 890-2862-A-1-E MSD

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA Prep Batch: 34105

%Rec Spike MSD MSD RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Benzene <0.00199 U F1 F2 0.100 0.07171 F2 mg/Kg 71 70 - 130 64 35 Toluene <0.00199 UF1F2 0.100 0.07701 F2 mg/Kg 77 70 - 130 77 35 Ethylbenzene <0.00199 UF1F2 0.100 0.07436 F2 mg/Kg 70 - 130 100 35 0.201 <0.00398 UF1F2 0.1307 F1 F2 65 70 - 130 m-Xylene & p-Xylene mg/Kg 117 35 0.100 o-Xylene <0.00199 U F1 F2 0.06968 F1 F2 mg/Kg 70 - 130 119 35

MSD MSD

Surrogate	%Recovery Qua	alifier Limits
4-Bromofluorobenzene (Surr)	89	70 - 130
1,4-Difluorobenzene (Surr)	97	70 - 130

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

Lab Sample ID: MB 880-33565/1-A

Matrix: Solid

Analysis Batch: 33582

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

Prep Batch: 33565

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1

(GRO)-C6-C10

Client: Ensolum

Job ID: 890-2864-1 SDG: Eddy County NM

> Prep Type: Total/NA Prep Batch: 33565

> Prep Type: Total/NA

Prep Type: Total/NA

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

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

Lab Sample ID: MB 880-33565/1-A **Matrix: Solid**

Analysis Batch: 33582

Project/Site: PLU 21 BD 104H

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	124		70 - 130	09/01/22 15:50	09/02/22 19:12	1
Į	o-Terphenyl	117		70 - 130	09/01/22 15:50	09/02/22 19:12	1

Lab Sample ID: LCS 880-33565/2-A

Matrix: Solid Analysis Batch: 33582

Analysis Batch: 33582							Prep	Batch: 33565
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	846.8		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	876.5		mg/Kg		88	70 - 130	
C10-C28)								

LCS LCS

Sample Sample

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	152	S1+	70 - 130
o-Terphenyl	123		70 - 130

Lab Sample ID: LCSD 880-33565/3-A

Matrix: Solid

Analysis Batch: 33582							Pre	p Batch:	33565
	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	 1000	858.2		mg/Kg		86	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	909.9		mg/Kg		91	70 - 130	4	20
C10-C28)									

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 156 S1+ 70 - 130 o-Terphenyl 130 70 - 130

Lab Sample ID: 890-2861-A-1-C MS

Matrix: Solid

Analysis Batch: 33582

Client Sample ID: Matrix Spike

MS MS

Prep Type: Total/NA Prep Batch: 33565

%Rec

Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Gasoline Range Organics <49.9 U 999 989.5 99 70 - 130 mg/Kg (GRO)-C6-C10 999 1046 105 70 - 130 Diesel Range Organics (Over <49.9 U mg/Kg

Spike

C1	0-C28)	

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	119		70 - 130
o-Terphenyl	92		70 - 130

Job ID: 890-2864-1

Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: 890-2861-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Analysis Batch: 33582 Prep Type: Total/NA Prep Batch: 33565

Sample Sample MSD MSD RPD Spike Result Qualifier Analyte Added Result Qualifier %Rec Limits RPD Limit Unit D Gasoline Range Organics <49.9 U 998 1037 mg/Kg 104 70 - 130 5 20 (GRO)-C6-C10 998 1069 107 70 - 130Diesel Range Organics (Over <49.9 U 2 20

C10-C28)

mg/Kg

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 121 o-Terphenyl 97 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33552/1-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 33925

Prep Type: Soluble

MB MB

Result Qualifier RL Unit Analyte D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 09/08/22 12:35

Lab Sample ID: LCS 880-33552/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 251.9 90 - 110 mg/Kg 101

Lab Sample ID: LCSD 880-33552/3-A

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

Matrix: Solid

Analysis Batch: 33925

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	252.8		mg/Kg	_	101	90 - 110	0	20

Lab Sample ID: 880-18647-A-35-C MS

Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 33925

Sample Sample Spike MS MS %Rec Result Qualifier Added Qualifier Analyte Result Unit %Rec Limits Chloride 251 100 90 - 110 30.9 282.5 mg/Kg

Lab Sample ID: 880-18647-A-35-D MSD

Client Sample ID: Matrix Spike Duplicate

Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 33925

Sample Sample Spike MSD MSD %Rec RPD Qualifier Added Qualifier Analyte Result Result %Rec Limits RPD Limit Unit D 251 282.1 Chloride 30.9 100 90 - 110 20 mg/Kg 0

QC Association Summary

Client: Ensolum

Job ID: 890-2864-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

GC VOA

Prep Batch: 34093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34093/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Total/NA	Solid	5035	
MB 880-34105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Total/NA	Solid	8021B	34105
MB 880-34093/5-A	Method Blank	Total/NA	Solid	8021B	34093
MB 880-34105/5-A	Method Blank	Total/NA	Solid	8021B	34105
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	8021B	34105
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34105
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	34105
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34105

Analysis Batch: 34257

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

Lab Sample ID 890-2864-1	Client Sample ID SS05	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Total/NA	Solid	8015B NM	33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33831

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Total/NA	Solid	8015 NM	

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

HPLC/IC

Leach Batch: 33552

Lab Sample ID 890-2864-1	Client Sample ID SS05	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
MB 880-33552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2864-1	SS05	Soluble	Solid	300.0	33552
MB 880-33552/1-A	Method Blank	Soluble	Solid	300.0	33552
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	300.0	33552
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33552
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	300.0	33552
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33552

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Lab Chronicle

Client: Ensolum Job ID: 890-2864-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS05

Lab Sample ID: 890-2864-1

Matrix: Solid

Date Collected: 08/30/22 13:35 Date Received: 08/30/22 16:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 07:18	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34257	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33831	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 23:09	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	33552	09/01/22 13:14	SMC	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33925	09/08/22 14:56	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following englytes	and the street and the state of a contract that			
the agency does not of	• '	it the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes for
,	• '	t the laboratory is not certifi Matrix	ed by the governing authority. This list ma	ay include analytes for
the agency does not of	fer certification.	•	, , ,	ay include analytes for

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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2864-1

SDG: Eddy County NM

tocol	Laboratory	
/846	EET MID	
SOP	EET MID	
/846	EET MID	
/846	EET MID	
AWW	EET MID	

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2864-1

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2864-1	SS05	Solid	08/30/22 13:35	08/30/22 16:04	0.5'

ice: Signature of this docum service. Eurofins Xenco will Eurofins Xenco. A minimum

SOUTH STATE

Circle Method(s) and Me

Total 200.7 / 6010

eurofins

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Chain of Custody

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

Work Order No:

Work Order Comments
ਾogram: UST/PST ∐ PRP∐ Brownfields ∐ RRC ∐ Superiund ∐
State of Project:
Reporting: Level III □ Level III □ PST/UST □ TRRP □ Level IV□
Peliverables: EDD ☐ ADaPT ☐ Other:

Date/Time	/: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	70	Date/Time	Date		ire)	Received by: (Signature)	Received	madure)
	tiated.	reumstances beyond the control orced unless previously negot	ent and relinquishment of samples constitutes a valid purchase order from client company to Eurotins Aenco, no amiliarus and subcontractions. It assumes an accommendation is allowed to circumstances beyond the control shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control shall not an 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 regolitated.	ns xenco, ns nses incurre ofins Xenco,	to Euron	ny losses submitte	ility for a	rchase order fro re any responsit rge of \$5 for eac	Shall not assur roject and a cha	of samples const st of samples and applied to each p	elinquishment only for the co f \$85.00 will be
470 / 7471	Hg: 1631 / 245.1 / 7470 / 7471	^g T! U Hg: 1	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag TI U	Be Cd C	s Ba	Sb A	RCRA	LP 6010: 8	TCLP / SF	zed	etal(s) to be analyzed
in U V Zn	O2 Na Sr TI S	Mo Ni K Se Ag Si	Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se Ag SiO2 Na Sr Tl Sn U V Zn	Be B Cd (Ва	Al Sb As		M Texas 11	8RCRA 13PPM	88	200.8 / 6020:
NAPP2210942764	A			\parallel			1				+
Incident Number:	lnc			+			+				
				-		T	T				
							H				
				+		T	+				
Cost Center: 1666351001	Cost Co			×	×	×	1	0.5' Grab/	1335	8/30/2022	S
Sample Comments	Sam			втех	TPH (8	CHLO	p Cont	Depth Grab/	Time Sampled	Date Sampled	Matrix
NaOH+ASCOIDIC ACIO. SAFC	NaOH+AS	<u>-</u> -		(802	3015	RIDE	T	D) 4	nperature:	Corrected Temperature	
Zn Acetate+NaOH: Zn	Zn Acetate		890-2864 Chain of Custody	1)	S (E	<u>. </u>	200	Reading:	Temperature Reading	No NA
NaoC ₃	Na ₂ S ₂ O ₃ NaSO ₃					PA	P	6.0	ctor:	Correction Factor:	Yes No NIA
NABIS	NaHSO4: NABIS					300	arai	DO 125	D	Thermometer ID	res) No
	H ₃ PO ₄ : HP			_).0)	nete	No No	Wet Ice:	No No	Temp Blank:
NaCH: Na	H ₂ S0 ₄ : H ₂						L	the lab, if received by 4:30pm	the lab, if rece	,	
	HCL: HC	-	-					TAT starts the day received by	TAT starts the	99	KASE PARKER
	Cool: Cool						L		Due Date:		EDDY COUNTY, NM
DI Water: H ₂ O	None: NO						Code	Rush	☑ Routine	ω	03E1558053
Preservative Codes	Pres		ANALYSIS REQUEST					Turn Around	Turn	04H	PLU 21 BD 104H

SAMPLE RECEIPT
Samples Received Intact

roject Location: ampler's Name:

ooler Custody Seals:

imple Custody Seals:

otal Containers:

Sample Identifica

City, State ZIP:

Carlsbad, NM 88220 9898540852

Email: bbelill@ensolum.com

roject Name: roject Number: Company Name:

Ben Belill Ensolum, LLC

3122 National parks Hwy

Address: City, State ZIP:

Garrett Green

XTO Energy, Inc.

3104 E. Green Street

Carlsbad, NM 88220

Bill to: (if different)
Company Name:

roject Manager:

Revised Date 08/25/2020 Rev. 2020.2

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2864-1

SDG Number: Eddy County NM

List Source: Eurofins Carlsbad

Login Number: 2864 List Number: 1

Creator: Stutzman, Amanda

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

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2864-1 SDG Number: Eddy County NM

List Source: Eurofins Midland

List Creation: 09/01/22 11:10 AM

Login Number: 2864 List Number: 2

Creator: Rodriguez, Leticia

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

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ANALYTICAL REPORT

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

Laboratory Job ID: 890-2865-1

Laboratory Sample Delivery Group: Eddy County NM

Client Project/Site: PLU 21 BD 104H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:18:37 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H
Laboratory Job ID: 890-2865-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Ensolum Job ID: 890-2865-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Qualifiers

GC VOA Qualifier

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

Qualifier Description

GC Semi VOA

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

HPLC/IC

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)

LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)

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 show	vn)
---	-----

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 (F	Radiochemistry)
----	---------------------------------------	-----------------

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2865-1

SDG: Eddy County NM

Job ID: 890-2865-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2865-1

Receipt

The sample was received on 8/30/2022 4:04 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 20.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34107 and analytical batch 880-34153 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

Method 8015MOD NM: Surrogate recovery for the following sample was outside control limits: SS07 (890-2865-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2865-1

Client Sample Results

Client: Ensolum Job ID: 890-2865-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS07

Date Collected: 08/30/22 13:45 Date Received: 08/30/22 16:04

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U F1	0.00201	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
Toluene	<0.00201	U F1	0.00201	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
Ethylbenzene	<0.00201	U F1 F2	0.00201	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
m-Xylene & p-Xylene	<0.00402	U F1 F2	0.00402	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
o-Xylene	<0.00201	U F1 F2	0.00201	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
Xylenes, Total	<0.00402	U F1 F2	0.00402	mg/Kg		09/09/22 12:37	09/10/22 19:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			09/09/22 12:37	09/10/22 19:30	1
1,4-Difluorobenzene (Surr)	87		70 - 130			09/09/22 12:37	09/10/22 19:30	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/12/22 09:52	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.8	U	49.8	mg/Kg			09/06/22 10:41	1
Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.8	U	49.8	mg/Kg		09/01/22 15:50	09/02/22 23:31	1
Diesel Range Organics (Over C10-C28)	<49.8	U	49.8	mg/Kg		09/01/22 15:50	09/02/22 23:31	1
Oll Range Organics (Over C28-C36)	<49.8	U	49.8	mg/Kg		09/01/22 15:50	09/02/22 23:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	131	S1+	70 - 130			09/01/22 15:50	09/02/22 23:31	1
o-Terphenyl	118		70 - 130			09/01/22 15:50	09/02/22 23:31	1
Method: 300.0 - Anions, Ion Chro	0							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	373		25.3	mg/Kg			09/08/22 15:01	5

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Surrogate Summary

Client: Ensolum Job ID: 890-2865-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2865-1	SS07	101	87	
890-2865-1 MS	SS07	85	92	
890-2865-1 MSD	SS07	116	98	
LCS 880-34107/1-A	Lab Control Sample	103	107	
LCSD 880-34107/2-A	Lab Control Sample Dup	132 S1+	105	
MB 880-34107/5-A	Method Blank	96	89	
Surrogate Legend				
BFB = 4-Bromofluoroben	zene (Surr)			
DFBZ = 1,4-Difluorobenz	ene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2861-A-1-C MS	Matrix Spike	119	92
890-2861-A-1-D MSD	Matrix Spike Duplicate	121	97
890-2865-1	SS07	131 S1+	118
LCS 880-33565/2-A	Lab Control Sample	152 S1+	123
LCSD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130
MB 880-33565/1-A	Method Blank	124	117
Surrogate Legend			

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-2865-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34107/5-A

Matrix: Solid Analysis Batch: 34153 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34107

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	•
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:37	09/10/22 19:08	
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		09/09/22 12:37	09/10/22 19:08	

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/09/22 12:37	09/10/22 19:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/09/22 12:37	09/10/22 19:08	1

Lab Sample ID: LCS 880-34107/1-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 34153

Prep Type: Total/NA

Prep Batch: 34107

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08977		mg/Kg		90	70 - 130	
Toluene	0.100	0.08000		mg/Kg		80	70 - 130	
Ethylbenzene	0.100	0.07969		mg/Kg		80	70 - 130	
m-Xylene & p-Xylene	0.200	0.1624		mg/Kg		81	70 - 130	
o-Xylene	0.100	0.09238		mg/Kg		92	70 - 130	

LCS LCS

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

Lab Sample ID: LCSD 880-34107/2-A

Matrix: Solid

Analysis Batch: 34153

Prep Type: Total/NA

Prep Batch: 34107

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.09121		mg/Kg		91	70 - 130	2	35	
Toluene	0.100	0.08741		mg/Kg		87	70 - 130	9	35	
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130	24	35	
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130	26	35	
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	26	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1 4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2865-1 MS

Matrix: Solid

Analysis Batch: 34153

Client Sample ID: SS07 Prep Type: Total/NA

Prep Batch: 34107

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.0998	0.03247	F1	mg/Kg		33	70 - 130	
Toluene	<0.00201	U F1	0.0998	0.03634	F1	mg/Kg		36	70 - 130	

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Page 7 of 19

Client Sample ID: SS07

Prep Type: Total/NA

QC Sample Results

Job ID: 890-2865-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: 890-2865-1 MS **Matrix: Solid**

Analysis Batch: 34153

Prep Batch: 34107 Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D Ethylbenzene <0.00201 U F1 F2 0.0998 0.03705 F1 37 70 - 130 mg/Kg <0.00402 U F1 F2 m-Xylene & p-Xylene 0.200 0.07196 F1 mg/Kg 36 70 - 130 <0.00201 U F1 F2 0.0998 0.04226 F1 42 70 - 130 o-Xylene mg/Kg

MS MS

Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 85 1,4-Difluorobenzene (Surr) 92 70 - 130

Lab Sample ID: 890-2865-1 MSD

Analysis Batch: 34153

Client Sample ID: SS07 **Matrix: Solid** Prep Type: Total/NA Prep Batch: 34107 Sample Sample Spike MSD MSD RPD

Result Qualifier RPD Limit Analyte babbA Result Qualifier %Rec Limits Unit Benzene <0.00201 UF1 0.0996 0.04628 F1 mg/Kg 46 70 - 130 35 35 Toluene <0.00201 UF1 0.0996 0.04928 F1 mg/Kg 49 70 - 130 30 35 Ethylbenzene <0.00201 UF1F2 0.0996 0.05680 F1 F2 57 70 - 130 42 35 mg/Kg m-Xylene & p-Xylene <0.00402 U F1 F2 0.199 0.1146 F1 F2 mq/Kq 58 70 - 130 46 35 <0.00201 U F1 F2 0.0996 0.06608 F1 F2 66 70 - 130 o-Xylene mg/Kg 44

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	116		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-33565/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 33565 Analysis Batch: 33582 мв мв

Result Qualifier RL Unit D Prepared Analyzed Dil Fac Analyte 50.0 09/01/22 15:50 09/02/22 19:12 <50.0 U Gasoline Range Organics mg/Kg (GRO)-C6-C10 09/01/22 15:50 09/02/22 19:12 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/01/22 15:50 09/02/22 19:12 mg/Kg

MB MB

%Recovery Limits Qualifier Prepared Analyzed Dil Fac Surrogate 1-Chlorooctane 124 70 - 130 09/01/22 15:50 09/02/22 19:12 117 70 - 130 09/01/22 15:50 09/02/22 19:12 o-Terphenyl

Lab Sample ID: LCS 880-33565/2-A

Matrix: Solid

Analysis Batch: 33582

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

Prep Batch: 33565

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	846.8		mg/Kg		85	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	876.5		mg/Kg		88	70 - 130	
C10-C28)								

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Job ID: 890-2865-1

Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

LCS LCS

%Recovery Qualifier

152 S1+

123

Lab Sample ID: LCS 880-33565/2-A

Limits

70 - 130

70 - 130

Matrix: Solid

Analysis Batch: 33582

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

Prep Batch: 33565

Lab Sample ID: LCSD 880-33565/3-A

Matrix: Solid Analysis Batch: 33582 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 33565

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 858.2 86 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 909.9 91 mg/Kg 70 - 13020

C10-C28)

Surrogate

o-Terphenyl

1-Chlorooctane

LCSD LCSD Surrogate %Recovery Qualifier Limits S1+ 70 - 130 1-Chlorooctane 156 70 - 130 o-Terphenyl 130

Lab Sample ID: 890-2861-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 33582

Prep Type: Total/NA

Prep Batch: 33565

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 999 989.5 mg/Kg 99 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1046 mg/Kg 105 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 119 70 - 130 o-Terphenyl 92

Lab Sample ID: 890-2861-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 33582

Prep Type: Total/NA

Prep Batch: 33565

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit U 998 1037 Gasoline Range Organics <49.9 mg/Kg 104 70 - 130 5 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 998 1069 mg/Kg 107 70 - 130 2 20

C10-C28)

Surrogate

o-Terphenyl

MSD MSD %Recovery Qualifier Limits 1-Chlorooctane 121 70 - 130 97 70 - 130

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Dil Fac

Client Sample ID: Method Blank

Analyzed

09/08/22 12:35

Client Sample ID: Lab Control Sample

%Rec

Limits

90 - 110

%Rec

Limits

90 - 110

Client Sample ID: Matrix Spike

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

RPD

Prep Type: Soluble

RL

5.00

Spike

Added

250

Spike

Added

250

Job ID: 890-2865-1

D

D

Prepared

%Rec

%Rec

101

101

Project/Site: PLU 21 BD 104H

Lab Sample ID: MB 880-33552/1-A

Matrix: Solid

Analysis Batch: 33925

Client: Ensolum

мв мв Analyte Result Qualifier

Method: 300.0 - Anions, Ion Chromatography

Chloride <5.00 U

Lab Sample ID: LCS 880-33552/2-A **Matrix: Solid**

Analysis Batch: 33925

Analyte

Chloride

Lab Sample ID: LCSD 880-33552/3-A **Matrix: Solid**

Analysis Batch: 33925

Analyte

Chloride

Lab Sample ID: 880-18647-A-35-C MS **Matrix: Solid**

Analysis Batch: 33925

Analyte

Chloride 30.9

Lab Sample ID: 880-18647-A-35-D MSD **Matrix: Solid**

Analysis Batch: 33925

Analyte Result Qualifier Added Chloride 251 30.9

Sample Sample

Sample Sample

Qualifier

Result

Spike

Spike

Added

251

282.5

Result

282.1

Result

Qualifier

Unit

LCS LCS

LCSD LCSD

MS MS

MSD MSD

Qualifier

Qualifier

Qualifier

Result

251.9

Result

252.8

mg/Kg

Unit

Unit

mg/Kg

mg/Kg

Unit mg/Kg

%Rec Limits 100

90 - 110

Client Sample ID: Matrix Spike Duplicate

%Rec

Prep Type: Soluble

%Rec RPD Unit %Rec Limits RPD Limit mg/Kg 100 90 - 110 0 20

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SDG: Eddy County NM

RPD

Limit

Released to Imaging: 12/13/2022 9:35:50 AM

QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2865-1

SDG: Eddy County NM

GC VOA

Prep Batch: 34107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Total/NA	Solid	5035	
MB 880-34107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2865-1 MS	SS07	Total/NA	Solid	5035	
890-2865-1 MSD	SS07	Total/NA	Solid	5035	

Analysis Batch: 34153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Total/NA	Solid	8021B	34107
MB 880-34107/5-A	Method Blank	Total/NA	Solid	8021B	34107
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	8021B	34107
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34107
890-2865-1 MS	SS07	Total/NA	Solid	8021B	34107
890-2865-1 MSD	SS07	Total/NA	Solid	8021B	34107

Analysis Batch: 34234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

Lab Sample ID 890-2865-1	Client Sample ID SS07	Prep Type Total/NA	Matrix Solid	Method 8015NM Prep	Prep Batch
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Total/NA	Solid	8015B NM	33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33832

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33552

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Soluble	Solid	DI Leach	
MB 880-33552/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

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QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

HPLC/IC (Continued)

Leach Batch: 33552 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33925

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2865-1	SS07	Soluble	Solid	300.0	33552
MB 880-33552/1-A	Method Blank	Soluble	Solid	300.0	33552
LCS 880-33552/2-A	Lab Control Sample	Soluble	Solid	300.0	33552
LCSD 880-33552/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33552
880-18647-A-35-C MS	Matrix Spike	Soluble	Solid	300.0	33552
880-18647-A-35-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33552

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Lab Chronicle

Client: Ensolum Job ID: 890-2865-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS07

Lab Sample ID: 890-2865-1

Matrix: Solid

EET MID

Date Collected: 08/30/22 13:45 Date Received: 08/30/22 16:04

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	34107	09/09/22 12:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34153	09/10/22 19:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34234	09/12/22 09:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33832	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 23:31	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	33552	09/01/22 13:14	SMC	EET MID

50 mL

50 mL

33925

09/08/22 15:01

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Laboratory References:

Analysis

Soluble

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

300.0

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Accreditation/Certification Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

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	NELAP		T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for w
the agency does not of	fer certification.	,	ou s, and governmig dualismy.	ay molado analytoo for v
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte	ay morado anarytoo tor v
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Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2865-1

SDG: Eddy County NM

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EET MID	
EET MID	
EET MID	

Method	Method Description	Protocol	Laboratory
3021B	Volatile Organic Compounds (GC)	SW846	EET MID
Total BTEX	Total BTEX Calculation	TAL SOP	EET MID
8015 NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
8015B NM	Diesel Range Organics (DRO) (GC)	SW846	EET MID
300.0	Anions, Ion Chromatography	MCAWW	EET MID
5035	Closed System Purge and Trap	SW846	EET MID
8015NM Prep	Microextraction	SW846	EET MID
DI Leach	Deionized Water Leaching Procedure	ASTM	EET MID

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2865-1

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2865-1	SS07	Solid	08/30/22 13:45	08/30/22 16:04	0.5'

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Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se

Ag SiO2 Na Sr Tl Sn U V Zn

Incident Number: NAPP2210942764

• eurofins

Chain of Custody TX (281) 240-4200, Dallas, TX (214) 90

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

Work Order No:

Deliverables:	Reporting: Lev	State of Project:	Program: UST		5) 794-1296 5) 988-3199
Deliverables: EDD	el II □Level III □PST/U	ct:	r/PST ☐ PRP ☐ Brownfle	Work Order Comments	www.xenco.com
] Other:	Reporting: Level II Level III PST/UST TRRP Level IV		Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund ☐	nments	Page1of1_

			0		
			(
			8/30/20 16Ce	SOI EC 10E/X FIFC OF SOLVE IN	1/my true
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)
	are due to circumstances beyond the control swill be enforced unless previously negotiated.	urred by the client if such losses are due to circunce, but not analyzed. These terms will be enforce	lity for any losses or expenses inc h sample submitted to Eurofins Xer	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, but not analyzed. These terms will be enforced unless previously negotiate.	f service. Eurofins Xenco will be liable only fo f Eurofins Xenco. A minimum charge of \$85.0
	indard terms and conditions	o, its affiliates and subcontractors. It assigns sta	n client company to Eurofins Xence	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	otice: Signature of this document and relinqu
7470 / 7471	T) U Hg: 1631 / 245.1 / 7470 / 7471	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	RCRA Sb As Ba Be Co		Circle Method(s) and Metal(s) to be analyzed

NaOH+Ascorbic Acid: SAPC

Sample Comments

Cost Center: 1666351001

H₃PO₄: HP NaHSO₄: NABIS Na₂S₂O₃: NaSO₃

Zn Acetate+NaOH: Zn

HCL: HC

None: NO

DI Water: H₂O

Preservative Codes

Cool: Cool

MeOH: Me HNO₃: HN NaOH: Na

SAMPLE RECEIPT

Temp Blank:

Wet Ice:

8

Parameters

res No

Samples Received Intact: Cooler Custody Seals:

Yes No

Correction Factor:
Temperature Reading:

Corrected Temperature:

Thermometer ID:

imple Custody Seals:

Sample Identification SS07

Matrix

Sampled 8/30/2022

Sampled / 34/5

Depth 0.5'

Comp Grab/ Date

Time

Grab/

TPH (8015)

BTEX (8021

CHLORIDES (EPA: 300.0)

890-2865 Chain of Custody

of

Sampler's Name:

Project Location:

EDDY COUNTY, NM

Due Date:

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

Routine

Rush

Turn Around

ANALYSIS REQUEST

Email: |bbelill@ensolum.com

Address: City, State ZIP:

Carlsbad, NM 88220

Bill to: (if different)
Company Name:

Garrett Green

XTO Energy, Inc. 3104 E. Green Street

KASE PARKER

Project Number:

roject Name:

PLU 21 BD 104H

03E1558053

Phone:

ity. State ZIP:

Carlsbad, NM 88220 9898540852

3122 National parks Hwy

roject Manager: ompany Name:

Ben Belill Ensolum, LLC

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2865-1

SDG Number: Eddy County NM

List Source: Eurofins Carlsbad

Login Number: 2865 List Number: 1

Creator: Stutzman, Amanda

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

Euronnis Carisbau

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Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2865-1 SDG Number: Eddy County NM

List Source: Eurofins Midland

Login Number: 2865 List Number: 2

List Creation: 09/01/22 11:10 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



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Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2866-1

Laboratory Sample Delivery Group: Eddy County NM

Client Project/Site: PLU 21 BD 104H

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:18:37 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

Client: Ensolum
Project/Site: PLU 21 BD 104H
Laboratory Job ID: 890-2866-1
SDG: Eddy County NM

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Definitions/Glossary

Client: Ensolum Job ID: 890-2866-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Qualifiers

GC VOA Qualifier

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

 F2
 MS/MSD RPD exceeds control limits

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

GC Semi VOA

 Qualifier
 Qualifier Description

 S1+
 Surrogate recovery exceeds control limits, high biased.

 U
 Indicates the analyte was analyzed for but not detected.

HPLC/IC

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

%R Percent Recovery

CFL Contains Free Liquid

CFU Colony Forming Unit

CNF Contains No Free Liquid

DER Duplicate Error Ratio (normalized absolute difference)

Dil Fac Dilution Factor

DL Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

EDL Estimated Detection Limit (Dioxin)

LOD Limit of Detection (DoD/DOE)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

MDC Minimum Detectable Concentration (Radiochemistry)

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

NC Not Calculated

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

NEG Negative / Absent
POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive
QC Quality Control

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Eurofins Carlsbad

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Case Narrative

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2866-1

SDG: Eddy County NM

Job ID: 890-2866-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2866-1

Receipt

The sample was received on 8/30/2022 4:04 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 20.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34107 and analytical batch 880-34153 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33565/2-A) and (LCSD 880-33565/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-33553 and analytical batch 880-33674 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

Matrix: Solid

Lab Sample ID: 890-2866-1

Client Sample Results

Client: Ensolum Job ID: 890-2866-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS06

Date Collected: 08/30/22 13:40 Date Received: 08/30/22 16:04

Sample Depth: 0.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/09/22 12:37	09/10/22 19:51	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			09/09/22 12:37	09/10/22 19:51	1
1,4-Difluorobenzene (Surr)	91		70 - 130			09/09/22 12:37	09/10/22 19:51	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range	•		D.	11-14	_	Bassassad	Anahaad	D!! E
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/06/22 10:41	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 23:52	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 23:52	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/01/22 15:50	09/02/22 23:52	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130			09/01/22 15:50	09/02/22 23:52	1
o-Terphenyl	102		70 - 130			09/01/22 15:50	09/02/22 23:52	1
Method: 300.0 - Anions, Ion Chro	omatography -							
Analyte	Result	Qualifier	RL	Unit mg/Kg	D	Prepared	Analyzed 09/07/22 09:04	Dil Fac

Eurofins Carlsbad

Surrogate Summary

Client: Ensolum Job ID: 890-2866-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate Re
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2865-A-1-C MS	Matrix Spike	85	92	
890-2865-A-1-D MSD	Matrix Spike Duplicate	116	98	
890-2866-1	SS06	110	91	
LCS 880-34107/1-A	Lab Control Sample	103	107	
LCSD 880-34107/2-A	Lab Control Sample Dup	132 S1+	105	
MB 880-34107/5-A	Method Blank	96	89	
Surrogate Legend				
BFB = 4-Bromofluorober	nzene (Surr)			
DFBZ = 1,4-Difluorobenz	zene (Surr)			

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2861-A-1-C MS	Matrix Spike	119	92	
890-2861-A-1-D MSD	Matrix Spike Duplicate	121	97	
890-2866-1	SS06	113	102	
LCS 880-33565/2-A	Lab Control Sample	152 S1+	123	
LCSD 880-33565/3-A	Lab Control Sample Dup	156 S1+	130	
MB 880-33565/1-A	Method Blank	124	117	
Surrogate Legend				

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Job ID: 890-2866-1 Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34107/5-A

Lab Sample ID: LCS 880-34107/1-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 34153

Client: Ensolum

Analysis Batch: 34153

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34107

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:37	09/10/22 19:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:37	09/10/22 19:08	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 12:37	09/10/22 19:08	1

MB MB

MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130	09/09/22 12:37	09/10/22 19:08	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/09/22 12:37	09/10/22 19:08	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 34107

Spike LCS LCS Analyte Added Result Qualifier Unit %Rec Limits Benzene 0.100 0.08977 mg/Kg 90 70 - 130 Toluene 0.100 0.08000 mg/Kg 80 70 - 130 0.100 0.07969 80 Ethylbenzene mg/Kg 70 - 130 0.200 0.1624 81 70 - 130 m-Xylene & p-Xylene mg/Kg 0.100 0.09238 70 - 130 o-Xylene mg/Kg

LCS LCS

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

Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 34153

Lab Sample ID: LCSD 880-34107/2-A

Prep Type: Total/NA Prep Batch: 34107

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09121		mg/Kg		91	70 - 130	2	35
Toluene	0.100	0.08741		mg/Kg		87	70 - 130	9	35
Ethylbenzene	0.100	0.1010		mg/Kg		101	70 - 130	24	35
m-Xylene & p-Xylene	0.200	0.2099		mg/Kg		105	70 - 130	26	35
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	26	35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	132	S1+	70 - 130
1.4-Difluorobenzene (Surr)	105		70 - 130

Lab Sample ID: 890-2865-A-1-C MS

Matrix: Solid

Analysis Batch: 34153

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

Prep Batch: 34107

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U F1	0.0998	0.03247	F1	mg/Kg		33	70 - 130	
Toluene	<0.00201	U F1	0.0998	0.03634	F1	mg/Kg		36	70 - 130	

Eurofins Carlsbad

Page 7 of 19

QC Sample Results

Job ID: 890-2866-1 Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: 890-2865-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 34153 Prep Batch: 34107

mpie Sampie	Бріке	IVIS	IVIS				%Rec
esult Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
0201 U F1 F2	0.0998	0.03705	F1	mg/Kg		37	70 - 130
0402 U F1 F2	0.200	0.07196	F1	mg/Kg		36	70 - 130
0201 U F1 F2	0.0998	0.04226	F1	mg/Kg		42	70 - 130
)	Result Qualifier	Result 00201 Qualifier UF1 F2 Added 0.0998 00402 U F1 F2 0.200	Result 00201 Qualifier Added 00201 Result 00201 00402 U F1 F2 0.0998 0.07196 00402 U F1 F2 0.200 0.07196	Result 00201 Qualifier Added 0.0998 Result 0.03705 Qualifier F1 00204 U F1 F2 0.0998 0.03705 F1 00402 U F1 F2 0.200 0.07196 F1	Result 00201 Qualifier Added 00201 Result 00201 Qualifier 00201 Unit 00201 00402 U F1 F2 0.200 0.07196 F1 mg/Kg	Result 00201 Qualifier Unit UF1 F2 Added 0.0998 Result 0.03705 Qualifier F1 Unit mg/Kg D mg/Kg 00402 U F1 F2 0.200 0.07196 F1 mg/Kg	Result 00201 Qualifier Unit Unit D00201 D 00201 MRec 00201 Qualifier Unit Unit Unit Unit Unit Unit Unit Unit

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 85 1,4-Difluorobenzene (Surr) 92 70 - 130

Lab Sample ID: 890-2865-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 34153

Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
<0.00201	U F1	0.0996	0.04628	F1	mg/Kg		46	70 - 130	35	35
<0.00201	U F1	0.0996	0.04928	F1	mg/Kg		49	70 - 130	30	35
<0.00201	U F1 F2	0.0996	0.05680	F1 F2	mg/Kg		57	70 - 130	42	35
<0.00402	U F1 F2	0.199	0.1146	F1 F2	mg/Kg		58	70 - 130	46	35
<0.00201	U F1 F2	0.0996	0.06608	F1 F2	mg/Kg		66	70 - 130	44	35
	Result <0.00201 <0.00201 <0.00201 <0.00201	<0.00201 U F1 <0.00201 U F1 F2 <0.00402 U F1 F2	Result Qualifier Added <0.00201	Result Qualifier Added Result <0.00201	Result Qualifier Added Result Qualifier <0.00201	Result Qualifier Added Result Qualifier Unit <0.00201	Result Qualifier Added Result Qualifier Unit D <0.00201	Result Qualifier Added Result Qualifier Unit D %Rec <0.00201	Result Qualifier Added Result Qualifier Unit D %Rec Limits <0.00201	Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD <0.00201

MSD MSD Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 116 1,4-Difluorobenzene (Surr) 98 70 - 130

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

Lab Sample ID: MB 880-33565/1-A Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33582 Prep Batch: 33565

		MB	MB						
An	alyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Ga	soline Range Organics	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
(GI	RO)-C6-C10								
Die	esel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1
C1	0-C28)								
OII	Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/01/22 15:50	09/02/22 19:12	1

MB MB %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 70 - 130 09/01/22 15:50 1-Chlorooctane 124 09/02/22 19:12 117 70 - 130 09/01/22 15:50 09/02/22 19:12 o-Terphenyl

Lab Sample ID: LCS 880-33565/2-A Client Sample ID: Lab Control Sample

Analysis Batch: 33582

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit %Rec Limits 1000 85 70 - 130 846.8 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 876.5 mg/Kg 88 70 - 130

C10-C28)

Matrix: Solid

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 33565

Prep Type: Total/NA

Prep Batch: 34107

Job ID: 890-2866-1

Prep Batch: 33565

91

70 - 130

Client: Ensolum Project/Site: PLU 21 BD 104H SDG: Eddy County NM

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

Lab Sample ID: LCS 880-33565/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid Analysis Batch: 33582

Diesel Range Organics (Over

LCS LCS Surrogate %Recovery Qualifier Limits

1-Chlorooctane 152 S1+ 70 - 130 o-Terphenyl 123 70 - 130

Lab Sample ID: LCSD 880-33565/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 33582 Prep Batch: 33565

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 858.2 86 70 - 13020 Gasoline Range Organics mg/Kg (GRO)-C6-C10

909.9

mg/Kg

1000

C10-C28) LCSD LCSD Surrogate %Recovery Qualifier Limits

S1+ 70 - 130 1-Chlorooctane 156 70 - 130 o-Terphenyl 130

Lab Sample ID: 890-2861-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 33582 Prep Batch: 33565 Sample Sample Spike MS MS

Analyte Added Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 999 989.5 mg/Kg 99 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1046 mg/Kg 105 70 - 130

C10-C28)

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 1-Chlorooctane 119 70 - 130 o-Terphenyl 92

Lab Sample ID: 890-2861-A-1-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 33582 Prep Batch: 33565 Sample Sample Snike MSD MSD RPD

	Janipie	Janipie	Opike	WISD	MISD				/01 \C C		KID	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<49.9	U	998	1037		mg/Kg		104	70 - 130	5	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U	998	1069		mg/Kg		107	70 - 130	2	20	
C10-C28)												

MSD MSD %Recovery Qualifier Surrogate Limits 1-Chlorooctane 121 70 - 130 97 70 - 130 o-Terphenyl

Eurofins Carlsbad

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: Ensolum Job ID: 890-2866-1
Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33553/1-A

Matrix: Solid

Analysis Batch: 33674

MB MB

 Analyte
 Result Chloride
 Qualifier St. Output
 RL Vinit Median
 Unit Median
 D Mere Prepared Median
 Analyzed Median
 Dil Fac Median

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 09/07/22 04:38
 1

Lab Sample ID: LCS 880-33553/2-A

Matrix: Solid

Analysis Batch: 33674

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 249.7 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-33553/3-A

Matrix: Solid

Analysis Batch: 33674

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 249.2 mg/Kg 100 90 - 110

Lab Sample ID: 880-18698-A-7-B MS

Matrix: Solid

Analysis Batch: 33674

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits 1250 Chloride 1170 F1 2391 90 - 110 mg/Kg

Lab Sample ID: 880-18698-A-7-C MSD

Matrix: Solid

Analysis Batch: 33674

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1170 F1 1250 2789 F1 mg/Kg 129 90 - 110 15 20

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QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2866-1 SDG: Eddy County NM

GC VOA

Prep Batch: 34107

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Total/NA	Solid	5035	
MB 880-34107/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34153

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Total/NA	Solid	8021B	34107
MB 880-34107/5-A	Method Blank	Total/NA	Solid	8021B	34107
LCS 880-34107/1-A	Lab Control Sample	Total/NA	Solid	8021B	34107
LCSD 880-34107/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34107
890-2865-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34107
890-2865-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34107

Analysis Batch: 34235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33565

•					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Total/NA	Solid	8015NM Prep	
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 33582

Lab Sample ID 890-2866-1	Client Sample ID SS06	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 33565
MB 880-33565/1-A	Method Blank	Total/NA	Solid	8015B NM	33565
LCS 880-33565/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33565
LCSD 880-33565/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33565
890-2861-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	33565
890-2861-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	33565

Analysis Batch: 33833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33553

Г					
Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Soluble	Solid	DI Leach	
MB 880-33553/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33553/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33553/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

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QC Association Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

HPLC/IC (Continued)

Leach Batch: 33553 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-18698-A-7-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18698-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33674

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2866-1	SS06	Soluble	Solid	300.0	33553
MB 880-33553/1-A	Method Blank	Soluble	Solid	300.0	33553
LCS 880-33553/2-A	Lab Control Sample	Soluble	Solid	300.0	33553
LCSD 880-33553/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33553
880-18698-A-7-B MS	Matrix Spike	Soluble	Solid	300.0	33553
880-18698-A-7-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33553

2

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Lab Chronicle

Client: Ensolum Job ID: 890-2866-1 Project/Site: PLU 21 BD 104H SDG: Eddy County NM

Client Sample ID: SS06 Lab Sample ID: 890-2866-1 Date Collected: 08/30/22 13:40

Matrix: Solid

	Date	Received:	08/30/22	16:04
Γ	_		Datal	_
			Batcl	h

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.05 g	5 mL	34107	09/09/22 12:37	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34153	09/10/22 19:51	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34235	09/12/22 09:52	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33833	09/06/22 10:41	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33565	09/01/22 15:50	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33582	09/02/22 23:52	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	33553	09/01/22 13:18	SMC	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33674	09/07/22 09:04	СН	EET MID

Laboratory References:

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

Eurofins Carlsbad

Accreditation/Certification Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

SDG: Eddy County NM

Laboratory: Eurofins Midland

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

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

3

4

6

4.6

11

13

Method Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2866-1

SDG: Eddy County NM

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104H

Job ID: 890-2866-1

SDG: Eddy County NM

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2866-1	SS06	Solid	08/30/22 13:40	08/30/22 16:04	0.5'

3

4

5

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9

44

12

Total 200.7 / 6010

200.8 / 6020:

8RCRA 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K

Se

Ag SiO2 Na Sr Ti Sn U V Zn

NAPP221094276 Incident Number:

13 14

eurofins

Chain of Custody

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

Work Order No:

Work Order Commam: UST/PST PRP Brownfield of Project: ting: Level II Level III PST/UST ADaPT Impaired the state of the stat	94-1296 88-3199	www.xenco.com	Page1of1
Program: UST/PST PRP Brownfields RRC Superfund State of Project: Reporting: Level III Level III PST/UST TRRP Level IV Deliverables: EDD ADaPT Other:		Work Order C	omments
State of Project: Reporting: Level II	Pro	gram: UST/PST ☐ PRP☐ Brown	nfields 🗌 RRC 🔲 Superfund 🗎
Reporting: Level II	Sta	te of Project:	
rables: EDD ADaPT	Rep	orting: Level II DLevel III DPS1	I/UST TRRP Level IV
	Del	verables: EDD	ſ ☐ Other:
	ANALYSIS REQUEST	1	Preservative Codes

Revised Date 08/25/2020 Rev. 2020.2					
		0			5
		4		8	3
		N. C.	AI CE 102-18	My color 18 - for experient I as my	In may he
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)
	ulle to circumistances beyond the common	ncurred by the client if such losses are due to circuits (enco, but not analyzed. These terms will be enforced	ity for any losses or expenses in sample submitted to Eurofins X	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 crief in such losses are use to chose before a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	of service. Eurofins Xenco will be liable only for f Eurofins Xenco. A minimum charge of \$85.0
	assigns standard terms and conditions	co, its affiliates and subcontractors. It assigns stand:	client company to Eurofins Xen	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	Notice: Signature of this document and relinqu
7470 / 7471	TI U Hg: 1631 / 245.1 / 7470 / 7471	TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U	RCRA Sb As Ba Be C		Circle Method(s) and Metal(s) to be analyzed

NaOH+Ascorbic Acid: SAPC Zn Acetate+NaOH: Zn Na₂S₂O₃: NaSO₃

Sample Comments

Cost Center: 1666351001

SAMPLE RECEIPT

smp Blank:

Yes No

Wet Ice:

ĕ

Parameters

8

Thermometer ID:

3

Correction Factor: Temperature Reading:

Corrected Temperature

Cooler Custody Seals: Samples Received Intact:

ample Custody Seals:

Yes No Yes No

Sample Identification SS06

Matrix

Sampled

Sampled

Date

Time

Grab/

TPH (8015) BTEX (8021

CHLORIDES (EPA: 300.0)

Chain of Custody

Cont # of

8/30/2022

1340

0.5 Depth

Grab/ Comp Sampler's Name:

oject Location:

EDDY COUNTY, NM

Due Date:

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

✓ Routine

Rush

Pres.

Cool: Cool

None: NO

H2SO4: H2

HNO₃: HN NaOH: Na MeOH: Me DI Water: H₂O

H₃PO₄: HP

NaHSO₄: NABIS

Turn Around

KASE PARKER

roject Number: roject Name: Phone:

9898540852

Email: bbelill@ensolum.com

City, State ZIP:

Carlsbad, NM 88220 3104 E. Green Street XTO Energy, Inc. Garrett Green

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

PLU 21 BD 104H

03E1558053

City, State ZIP:

Carlsbad, NM 88220 3122 National parks Hwy

ddress:

ompany Name: oject Manager:

Ensolum, LLC Ben Belill

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2866-1 SDG Number: Eddy County NM

List Source: Eurofins Carlsbad

Login Number: 2866 List Number: 1

<6mm (1/4").

Released to Imaging: 12/13/2022 9:35:50 AM

Creator: Stutzman, Amanda

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

Eurofins Carlsbad Page 18 of 19 9/12/2022

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Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-2866-1

SDG Number: Eddy County NM

Answer

N/A

True

N/A

Comment

List Source: Eurofins Midland

List Creation: 09/01/22 11:10 AM

Login Number: 2866 List Number: 2

Sample Preservation Verified.

MS/MSDs

<6mm (1/4").

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

Containers requiring zero headspace have no headspace or bubble is

Question

Creator: Rodriguez, Leticia

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
OC is present.	True
COC is filled out in ink and legible.	True
OC is filled out with all pertinent information.	True
the Field Sampler's name present on COC?	True
here are no discrepancies between the containers received and the COC.	True
amples are received within Holding Time (excluding tests with immediate ITs)	True
Sample containers have legible labels.	True
containers are not broken or leaking.	True
ample collection date/times are provided.	True
ppropriate sample containers are used.	True
Sample bottles are completely filled.	True

-

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12

14

Released to Imaging: 12/13/2022 9:35:50 AM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2875-1

Laboratory Sample Delivery Group: 03E1558053

Client Project/Site: PLU 21 BD 104

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Ben Belill

RAMER

Authorized for release by: 9/12/2022 9:25:09 AM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

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

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

 Client: Ensolum
 Laboratory Job ID: 890-2875-1

 Project/Site: PLU 21 BD 104
 SDG: 03E1558053

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Definitions/Glossary

Job ID: 890-2875-1 Client: Ensolum Project/Site: PLU 21 BD 104

SDG: 03E1558053

Qualifiers

GC VOA Qualifier

F1 MS and/or MSD recovery exceeds control limits. F2

MS/MSD RPD exceeds control limits S1-

Qualifier Description

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

GC Semi VOA

Qualifier **Qualifier Description**

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

HPLC/IC

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

Duplicate Error Ratio (normalized absolute difference) DER

Dil Fac **Dilution Factor**

Detection Limit (DoD/DOE)

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

DLC Decision Level Concentration (Radiochemistry)

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

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

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

NC Not Calculated

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

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

PRES Presumptive

Quality Control QC

Relative Error Ratio (Radiochemistry) **RER**

Reporting Limit or Requested Limit (Radiochemistry) RL

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Job ID: 890-2875-1 Project/Site: PLU 21 BD 104 SDG: 03E1558053

Job ID: 890-2875-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2875-1

Receipt

The samples were received on 9/1/2022 9:21 AM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 1.4°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34105 and analytical batch 880-34151 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

GC Semi VOA

Method 8015MOD_NM: Surrogate recovery for the following samples were outside control limits: (LCS 880-33656/2-A) and (LCSD 880-33656/3-A). Evidence of matrix interferences is not obvious.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-2875-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-2875-1

 Project/Site: PLU 21 BD 104
 SDG: 03E1558053

Client Sample ID: FS01

Date Collected: 08/31/22 12:30 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:38	
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:38	
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:38	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/09/22 12:34	09/11/22 07:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:38	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/09/22 12:34	09/11/22 07:38	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	35	S1-	70 - 130			09/09/22 12:34	09/11/22 07:38	1
1,4-Difluorobenzene (Surr)	123		70 - 130			09/09/22 12:34	09/11/22 07:38	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/12/22 10:03	-
Method: 8015 NM - Diesel Range			D.	11-14		Dunnanad	Amakanad	D:: F-
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
		Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/06/22 09:47	
Analyte		Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH	Result <49.9 ge Organics (Di	Qualifier U			D 	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result <49.9 ge Organics (Di	Qualifier U RO) (GC) Qualifier	49.9	mg/Kg			09/06/22 09:47	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9 49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 12:01	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (Dige Result	Qualifier U RO) (GC) Qualifier U	49.9	mg/Kg		Prepared	09/06/22 09:47 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (D) Result <49.9 49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 12:01	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 12:01 09/03/22 12:01	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07	Analyzed 09/03/22 12:01 09/03/22 12:01	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07 09/02/22 15:07 Prepared	Analyzed 09/03/22 12:01 09/03/22 12:01 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U RO) (GC) Qualifier U U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07 09/02/22 15:07 Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 12:01 09/03/22 12:01 Analyzed 09/03/22 12:01	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U RO) (GC) Qualifier U U Qualifier	49.9 RL 49.9 49.9 49.9 Limits 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07 09/02/22 15:07 Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 12:01 09/03/22 12:01 Analyzed 09/03/22 12:01	Dil Fac

Client Sample ID: FS02

Date Collected: 08/31/22 12:35 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 07:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	81		70 - 130			09/09/22 12:34	09/11/22 07:58	1

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Lab Sample ID: 890-2875-2

Matrix: Solid

2

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0

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Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Lab Sample ID: 890-2875-2 Client Sample ID: FS02 Date Collected: 08/31/22 12:35 **Matrix: Solid**

Date Received: 09/01/22 09:21 Sample Depth: 1

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

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	107	70 130	09/09/22 12:34	09/11/22 07:58	

Method: Total BTEX - Total BTEX Calculation Analyte Result Qualifier RL Unit D Analyzed Prepared

Dil Fac Total BTEX <0.00399 U 0.00399 09/12/22 10:03 mg/Kg

Method: 8015 NM - Diesel Range Organics (DRO) (GC) Dil Fac RL Unit D Prepared Analyzed

Total TPH <49.9 U 49.9 mg/Kg 09/06/22 09:47

Method: 8015B NM - Diesel Range Organics (DRO) (GC) D Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac <49.9 U 49.9 09/02/22 15:07 09/03/22 13:05 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 49.9 mg/Kg 09/02/22 15:07 09/03/22 13:05 C10-C28) OII Range Organics (Over C28-C36) <49.9 U 49.9 mg/Kg 09/02/22 15:07 09/03/22 13:05

Surrogate %Recovery Qualifier Limits Prepared Analyzed Dil Fac 1-Chlorooctane 90 70 - 130 09/02/22 15:07 09/03/22 13:05 09/02/22 15:07 o-Terphenyl 117 70 - 130 09/03/22 13:05

Method: 300.0 - Anions, Ion Chromatography - Soluble Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac 2470 24.9 09/09/22 04:09 Chloride mg/Kg

Client Sample ID: FS03 Lab Sample ID: 890-2875-3

Date Collected: 08/31/22 12:40 Matrix: Solid Date Received: 09/01/22 09:21

Sample Depth: 1

Method: 8021B - Volatile Organic	Compounds (GC)				
Analyte	Result	Qualifier	RL	Unit	D	Prepared
Benzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34
Toluene	< 0.00199	U	0.00199	mg/Kg		09/09/22 12:34

Ethylbenzene	<0.00199	U	0.00199	mg/Kg	09/09/22 12:34	09/11/22 08:19	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg	09/09/22 12:34	09/11/22 08:19	1
o-Xylene	<0.00199	U	0.00199	mg/Kg	09/09/22 12:34	09/11/22 08:19	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg	09/09/22 12:34	09/11/22 08:19	1

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83	70 - 130	09/09/22 12:34	09/11/22 08:19	1
1,4-Difluorobenzene (Surr)	110	70 - 130	09/09/22 12:34	09/11/22 08:19	1

Method: Total BTEX - Total BTEX 0	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 10:03	1

Method: 8015 NM - Diesel Range C	Organics (DRO) (GC)						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/06/22 09:47	1

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Analyzed

09/11/22 08:19 09/11/22 08:19

Dil Fac

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS03

Lab Sample ID: 890-2875-3 Date Collected: 08/31/22 12:40 Matrix: Solid

Date Received: 09/01/22 09:21 Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 13:25	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 13:25	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 13:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			09/02/22 15:07	09/03/22 13:25	1
o-Terphenyl	121		70 - 130			09/02/22 15:07	09/03/22 13:25	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
			4.95	mg/Kg			09/09/22 04:14	

Client Sample ID: FS04 Lab Sample ID: 890-2875-4 Matrix: Solid

Date Collected: 08/31/22 12:45 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 08:39	
Toluene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 08:39	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 08:39	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 08:39	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 08:39	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 08:39	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130			09/09/22 12:34	09/11/22 08:39	1
1,4-Difluorobenzene (Surr)	113		70 - 130			09/09/22 12:34	09/11/22 08:39	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 10:03	1
-								
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Method: 8015 NM - Diesel Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
•	•	Qualifier	RL 49.9	<mark>Unit</mark> mg/Kg	<u>D</u>	Prepared	Analyzed 09/06/22 09:47	
Analyte Total TPH	Result <49.9	Qualifier U			<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9 ge Organics (D	Qualifier U			<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result <49.9 ge Organics (D	Qualifier U RO) (GC) Qualifier	49.9	mg/Kg			09/06/22 09:47	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 ge Organics (D Result	Qualifier U RO) (GC) Qualifier U	49.9	mg/Kg		Prepared	09/06/22 09:47 Analyzed	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 ge Organics (D Result <49.9	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 13:45	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	Qualifier U RO) (GC) Qualifier U	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07	09/06/22 09:47 Analyzed 09/03/22 13:45 09/03/22 13:45	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	Qualifier U RO) (GC) Qualifier U U	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/02/22 15:07 09/02/22 15:07	Analyzed 09/03/22 13:45 09/03/22 13:45	Dil Fac Dil Fac 1 Dil Fac 1 1 Dil Fac 1

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9/12/2022

Matrix: Solid

Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS04 Lab Sample ID: 890-2875-4

Date Collected: 08/31/22 12:45 Matrix: Solid Date Received: 09/01/22 09:21

Sample Depth: 1

Method: 300.0 - Anion	s, Ion Chromatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5300		49.5	mg/Kg			09/09/22 04:18	10

Client Sample ID: FS05 Lab Sample ID: 890-2875-5

Date Collected: 08/31/22 12:50 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 09:00	
Toluene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 09:00	
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 09:00	
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/09/22 12:34	09/11/22 09:00	
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 09:00	
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/09/22 12:34	09/11/22 09:00	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil F
4-Bromofluorobenzene (Surr)	81		70 - 130			09/09/22 12:34	09/11/22 09:00	
1,4-Difluorobenzene (Surr)	108		70 - 130			09/09/22 12:34	09/11/22 09:00	
Method: Total BTEX - Total BTEX	Calculation							
	Desuit	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil F
Analyte	Result	Qualifier	114			opa.oa		
Total BTEX Method: 8015 NM - Diesel Range	<0.00404 Organics (DR	U (GC)	0.00404	mg/Kg			09/12/22 10:03	
Analyte Total BTEX Method: 8015 NM - Diesel Range	<0.00404 Organics (DR	U (GC)	0.00404	mg/Kg			09/12/22 10:03	
Total BTEX	<0.00404 Organics (DR	O) (GC) Qualifier		mg/Kg		Prepared		Dil F
Total BTEX Method: 8015 NM - Diesel Range Analyte	<0.00404 Organics (DRO	O) (GC) Qualifier	0.00404 RL	mg/Kg			09/12/22 10:03 Analyzed	Dil F
Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH	<0.00404 Organics (DRO Result <49.9	O) (GC) Qualifier	0.00404 RL	mg/Kg			09/12/22 10:03 Analyzed	Dil F
Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang	<0.00404 Organics (DR) Result <49.9 Je Organics (DI)	O) (GC) Qualifier	0.00404 RL	mg/Kg			09/12/22 10:03 Analyzed	Dil F
Total BTEX Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	<0.00404 Organics (DR) Result <49.9 Je Organics (DI)	O) (GC) Qualifier U RO) (GC) Qualifier	0.00404 RL 49.9	mg/Kg Unit mg/Kg	<u>D</u>	Prepared	09/12/22 10:03 Analyzed 09/06/22 09:47	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	<0.00404 Organics (DR) Result <49.9 ge Organics (DI) Result	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00404 RL 49.9	mg/Kg Unit mg/Kg Unit	<u>D</u>	Prepared Prepared	09/12/22 10:03 Analyzed 09/06/22 09:47 Analyzed	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	<0.00404 Organics (DR) Result <49.9 ge Organics (DI) Result <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U	0.00404 RL 49.9 RL 49.9	mg/Kg Unit mg/Kg Unit mg/Kg	<u>D</u>	Prepared Prepared 09/02/22 15:07	09/12/22 10:03 Analyzed 09/06/22 09:47 Analyzed 09/03/22 14:06	
Total BTEX Method: 8015 NM - Diesel Range Analyte	<0.00404 Organics (DR) Result <49.9 ge Organics (DI) Result <49.9 <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00404 RL 49.9 RL 49.9	unit mg/Kg Unit mg/Kg unit mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/02/22 15:07	Analyzed 09/03/22 14:06	
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<0.00404 Organics (DR) Result <49.9 ge Organics (DI) Result <49.9 <49.9	U O) (GC) Qualifier U RO) (GC) Qualifier U U U	0.00404 RL 49.9 RL 49.9 49.9	unit mg/Kg Unit mg/Kg unit mg/Kg mg/Kg	<u>D</u>	Prepared Prepared 09/02/22 15:07 09/02/22 15:07	Analyzed 09/03/22 14:06 09/03/22 14:06	Dil F

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Analyzed 09/09/22 04:23

RL

4.99

Unit

mg/Kg

D

Prepared

Result Qualifier

555

Dil Fac

Analyte

Chloride

Matrix: Solid

Job ID: 890-2875-1 SDG: 03E1558053

Client Sample ID: FS06 Lab Sample ID: 890-2875-6

Date Collected: 08/31/22 12:55 Date Received: 09/01/22 09:21

Sample Depth: 1

Client: Ensolum

Project/Site: PLU 21 BD 104

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 10:49	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	86		70 - 130			09/09/22 12:34	09/11/22 10:49	1
1,4-Difluorobenzene (Surr)	103		70 - 130			09/09/22 12:34	09/11/22 10:49	1
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/12/22 10:03	1
Method: 8015 NM - Diesel Range Analyte		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/06/22 09:47	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 14:26	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 14:26	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 14:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	91		70 - 130			09/02/22 15:07	09/03/22 14:26	1
o-Terphenyl	118		70 - 130			09/02/22 15:07	09/03/22 14:26	1
-		Oalubia						
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Method: 300.0 - Anions, Ion Chro Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS07 Lab Sample ID: 890-2875-7

Date Collected: 08/31/22 13:00 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 11:10	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	74		70 - 130			09/09/22 12:34	09/11/22 11:10	1

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Matrix: Solid

Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS07 Lab Sample ID: 890-2875-7

Date Collected: 08/31/22 13:00 Matrix: Solid Date Received: 09/01/22 09:21

Sample Depth: 1

Method: 8021B - Volatile Orga		, - , (iaca,					
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	112		70 - 130			09/09/22 12:34	09/11/22 11:10	1
_ Method: Total BTEX - Total B	TEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 10:03	1
Mathed 0045 NM Discal De	O	0) (00)						
Method: 8015 NM - Diesel Rai Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	•	Qualifier	RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/06/22 09:47	Dil Fac
Analyte		Qualifier U			<u>D</u>	Prepared		Dil Fac
Analyte Total TPH	Result 49.9 Range Organics (D	Qualifier U			<u>D</u>	Prepared Prepared		Dil Fac

C10-C28)	<49.9 U	49.9	mg/kg	09/02/22 15:07	09/03/22 14.46	ı
Oll Range Organics (Over C28-C36)	<49.9 U	49.9	mg/Kg	09/02/22 15:07	09/03/22 14:46	1
Surrogate	%Recovery Quali	ifier Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	92	70 _ 130		09/02/22 15:07	09/03/22 14:46	1
o-Terphenvl	120	70 - 130		09/02/22 15:07	09/03/22 14:46	1

Method: 300.0 - Anions, Ion Chror	natography - Soluble						
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2880	25.2	mg/Kg			09/09/22 04:33	5

Client Sample ID: FS08 Lab Sample ID: 890-2875-8 **Matrix: Solid**

Date Collected: 08/31/22 13:05 Date Received: 09/01/22 09:21

Sample Depth: 1

Total TPH

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 11:30	
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 11:30	•
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 11:30	
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		09/09/22 12:34	09/11/22 11:30	
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 11:30	4
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		09/09/22 12:34	09/11/22 11:30	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	82		70 - 130			09/09/22 12:34	09/11/22 11:30	
1,4-Difluorobenzene (Surr)	111		70 - 130			09/09/22 12:34	09/11/22 11:30	7
- Method: Total BTEX - Total B	TEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			09/12/22 10:03	1
 Method: 8015 NM - Diesel Rai	nge Organics (DR	O) (GC)						
Method. 0013 MM - Diesel Kal	nge Organics (Dit	U) (UU)						

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09/06/22 09:47

50.0

mg/Kg

<50.0 U

Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS08 Lab Sample ID: 890-2875-8

Date Collected: 08/31/22 13:05 Matrix: Solid Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:06	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:06	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:06	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	89		70 - 130			09/02/22 15:07	09/03/22 15:06	1
o-Terphenyl	114		70 - 130			09/02/22 15:07	09/03/22 15:06	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
motifical cools Amono, for one								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Lab Sample ID: 890-2875-9 **Client Sample ID: FS09** Matrix: Solid

Date Collected: 08/31/22 13:10

Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
m-Xylene & p-Xylene	<0.00404	U	0.00404	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
Xylenes, Total	<0.00404	U	0.00404	mg/Kg		09/09/22 12:34	09/11/22 11:50	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			09/09/22 12:34	09/11/22 11:50	1
1,4-Difluorobenzene (Surr)	112		70 - 130			09/09/22 12:34	09/11/22 11:50	1
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00404	U	0.00404	mg/Kg			09/12/22 10:03	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/06/22 09:47	1
Method: 8015B NM - Diesel Rang	je Organics (Di	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:27	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 15:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	86		70 - 130			09/02/22 15:07	09/03/22 15:27	1
o-Terphenyl	110		70 - 130			09/02/22 15:07	09/03/22 15:27	1

Matrix: Solid

Job ID: 890-2875-1

Lab Sample ID: 890-2875-9

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS09

Date Collected: 08/31/22 13:10 Date Received: 09/01/22 09:21

Sample Depth: 1

Method: 300.0 - Anions, Ion Chron	natography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7220		49.7	mg/Kg			09/07/22 18:38	10

Client Sample ID: FS10 Lab Sample ID: 890-2875-10 Matrix: Solid

Date Collected: 08/31/22 13:15 Date Received: 09/01/22 09:21

Sample Depth: 1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 12:11	
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 12:11	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 12:11	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 12:11	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 12:11	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/09/22 12:34	09/11/22 12:11	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	76		70 - 130			09/09/22 12:34	09/11/22 12:11	1
1,4-Difluorobenzene (Surr)	109		70 - 130			09/09/22 12:34	09/11/22 12:11	1
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/12/22 10:03	1
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9	mg/Kg	D	Prepared	Analyzed 09/06/22 09:47	Dil Fac
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 15:47	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 15:47	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/02/22 15:07	09/03/22 15:47	,
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	86		70 - 130			09/02/22 15:07	09/03/22 15:47	1
o-Terphenyl	108		70 - 130			09/02/22 15:07	09/03/22 15:47	1
Method: 300.0 - Anions, Ion Chro								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	305		5.03	mg/Kg			09/07/22 18:43	1

Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Lab Sample ID: 890-2875-11 **Client Sample ID: FS11** Date Collected: 08/31/22 13:20

Matrix: Solid

Sample Depth: 1

Date Received: 09/01/22 09:21

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
Toluene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/09/22 12:34	09/11/22 12:31	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	77		70 - 130			09/09/22 12:34	09/11/22 12:31	1
1,4-Difluorobenzene (Surr)	118		70 - 130			09/09/22 12:34	09/11/22 12:31	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/12/22 10:03	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/06/22 09:47	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 16:27	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 16:27	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 16:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	84		70 - 130			09/02/22 15:07	09/03/22 16:27	1
o-Terphenyl	106		70 - 130			09/02/22 15:07	09/03/22 16:27	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2300		24.8	mg/Kg			09/07/22 18:48	5

Surrogate Summary

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104 SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2862-A-1-D MS	Matrix Spike	64 S1-	116	
890-2862-A-1-E MSD	Matrix Spike Duplicate	89	97	
890-2875-1	FS01	35 S1-	123	
890-2875-2	FS02	81	107	
890-2875-3	FS03	83	110	
890-2875-4	FS04	80	113	
890-2875-5	FS05	81	108	
890-2875-6	FS06	86	103	
890-2875-7	FS07	74	112	
890-2875-8	FS08	82	111	
890-2875-9	FS09	78	112	
890-2875-10	FS10	76	109	
890-2875-11	FS11	77	118	
LCS 880-34105/1-A	Lab Control Sample	83	90	
LCSD 880-34105/2-A	Lab Control Sample Dup	80	101	
MB 880-34093/5-A	Method Blank	80	123	
MB 880-34105/5-A	Method Blank	80	113	
Surrogate Legend				

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	
ab Sample ID	Client Sample ID	(70-130)	(70-130)	
90-2875-1	FS01	87	112	
90-2875-1 MS	FS01	86	92	
90-2875-1 MSD	FS01	82	91	
90-2875-2	FS02	90	117	
90-2875-3	FS03	93	121	
90-2875-4	FS04	89	114	
90-2875-5	FS05	94	122	
90-2875-6	FS06	91	118	
90-2875-7	FS07	92	120	
90-2875-8	FS08	89	114	
90-2875-9	FS09	86	110	
90-2875-10	FS10	86	108	
90-2875-11	FS11	84	106	
CS 880-33656/2-A	Lab Control Sample	114	143 S1+	
CSD 880-33656/3-A	Lab Control Sample Dup	114	146 S1+	
1B 880-33656/1-A	Method Blank	91	114	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104

SDG: 03E1558053

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34093/5-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34093

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 11:13	09/10/22 17:51	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		09/09/22 11:13	09/10/22 17:51	1

MB MB

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	80	70 - 130
1,4-Difluorobenzene (Surr)	123	70 - 130

Prepared Dil Fac Analyzed 09/09/22 11:13 09/10/22 17:51 09/09/22 11:13 09/10/22 17:51

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

Prep Batch: 34105

Analysis Batch: 34151

Matrix: Solid

Lab Sample ID: MB 880-34105/5-A

	IIID							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/09/22 12:34	09/11/22 05:27	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/09/22 12:34	09/11/22 05:27	1

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	80		70 - 130	09/09/22 12:34	09/11/22 05:27	1
1,4-Difluorobenzene (Surr)	113		70 - 130	09/09/22 12:34	09/11/22 05:27	1

Lab Sample ID: LCS 880-34105/1-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 34105

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08120		mg/Kg		81	70 - 130	
Toluene	0.100	0.08547		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.08953		mg/Kg		90	70 - 130	
m-Xylene & p-Xylene	0.200	0.1522		mg/Kg		76	70 - 130	
o-Xylene	0.100	0.07848		mg/Kg		78	70 - 130	

LCS LCS

Surrogate	%Recovery Qualific	er Limits
4-Bromofluorobenzene (Surr)	83	70 - 130
1,4-Difluorobenzene (Surr)	90	70 - 130

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Lab Control Sample	e Dup
Prep Type: Tot	al/NA

Prep Batch: 34105

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1089	,	mg/Kg		109	70 - 130	29	35

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QC Sample Results

Job ID: 890-2875-1 Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

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

Lab Sample ID: LCSD 880-34105/2-A

Matrix: Solid Analysis Batch: 34151 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34105

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D Toluene 0.100 0.09966 100 70 - 130 35 mg/Kg 15 Ethylbenzene 0.100 0.09820 mg/Kg 98 70 - 130 9 35 0.200 m-Xylene & p-Xylene 0.1717 mg/Kg 86 70 - 130 35 12 o-Xylene 0.100 0.08621 mg/Kg 86 70 - 130 9 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	80		70 - 130
1,4-Difluorobenzene (Surr)	101		70 - 130

Lab Sample ID: 890-2862-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 34151

Prep Type: Total/NA

Prep Batch: 34105

MS MS %Rec Spike Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Benzene 0.0998 0.03691 F1 37 <0.00199 U F1 F2 ma/Ka 70 - 130 Toluene <0.00199 UF1F2 0.0998 0.03406 F1 34 70 - 130 mg/Kg Ethylbenzene 0.0998 0.02475 F1 70 - 130 < 0.00199 U F1 F2 mg/Kg 25 m-Xylene & p-Xylene <0.00398 U F1 F2 0.200 0.03414 F1 17 70 - 130 mg/Kg o-Xylene <0.00199 U F1 F2 0.0998 0.01758 F1 mg/Kg 18 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	64	S1-	70 - 130		
1,4-Difluorobenzene (Surr)	116		70 - 130		

Lab Sample ID: 890-2862-A-1-E MSD

Matrix: Solid

Analysis Batch: 34151

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 34105

%Rec Spike MSD MSD RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Benzene <0.00199 U F1 F2 0.100 0.07171 F2 mg/Kg 71 70 - 130 64 35 Toluene <0.00199 U F1 F2 0.100 0.07701 F2 mg/Kg 77 70 - 130 77 35 Ethylbenzene <0.00199 UF1F2 0.100 0.07436 F2 mg/Kg 74 70 - 130 100 35 0.201 0.1307 F1 F2 65 70 - 130 m-Xylene & p-Xylene <0.00398 UF1F2 mg/Kg 117 35 0.100 o-Xylene <0.00199 U F1 F2 0.06968 F1 F2 mg/Kg 70 - 130 119 35

MSD MSD

Surrogate	%Recovery	Quaimer	Limits
4-Bromofluorobenzene (Surr)	89		70 - 130
1,4-Difluorobenzene (Surr)	97		70 - 130

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

Lab Sample ID: MB 880-33656/1-A

Matrix: Solid

Analysis Batch: 33684

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

Prep Batch: 33656

мв мв Analyte Result Qualifier RL Unit Prepared Analyzed <50.0 U 50.0 mg/Kg 09/02/22 15:07 09/03/22 10:57 Gasoline Range Organics (GRO)-C6-C10

Client: Ensolum

Job ID: 890-2875-1

SDG: 03E1558053

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

Lab Sample ID: MB 880-33656/1-A

Lab Sample ID: LCS 880-33656/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 33684

Project/Site: PLU 21 BD 104

Client	Sample	ID:	Me	thoo	l B	lank
	D				- 4 - 1	

Prep Type: Total/NA Prep Batch: 33656

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 10:57	1
C10-C28)								
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/02/22 15:07	09/03/22 10:57	1

MB MB

MB MB

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	1-Chlorooctane	91		70 - 130	09/02/22 15:07	09/03/22 10:57	1
Į	o-Terphenyl	114		70 - 130	09/02/22 15:07	09/03/22 10:57	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 33656

Analysis Batch: 33684 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 894.9 89 70 - 130 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 1162 mg/Kg 116 70 - 130 C10-C28)

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	114		70 - 130
o-Terphenyl	143	S1+	70 - 130

Lab Sample ID: LCSD 880-33656/3-A

Matrix: Solid

Analysis Batch: 33684

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

Prep Batch: 33656

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	1000	917.3		mg/Kg		92	70 - 130	2	20	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1227		mg/Kg		123	70 - 130	5	20	
C10-C28)										

LCSD LCSD %Recovery Qualifier Limits 114 70 - 130 146 S1+ 70 - 130

Lab Sample ID: 890-2875-1 MS

Matrix: Solid

Surrogate

o-Terphenyl

1-Chlorooctane

Analysis Batch: 33684

Client Sample ID: FS01 Prep Type: Total/NA

Prep Batch: 33656

	Sample	Sample	Spike	MS	MS				%Rec
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	834.8		mg/Kg		84	70 - 130
Diesel Range Organics (Over	<49.9	U	999	845.0		mg/Kg		82	70 - 130

C10-C28)

	MS	MS			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	86		70 - 130		
o-Terphenvl	92		70 - 130		

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104

SDG: 03E1558053

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

Lab Sample ID: 890-2875-1 MSD **Client Sample ID: FS01 Matrix: Solid** Prep Type: Total/NA Analysis Batch: 33684 Prep Batch: 33656

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	<49.9	U	998	821.8		mg/Kg		82	70 - 130	2	20
(GRO)-C6-C10											
Diesel Range Organics (Over	<49.9	U	998	840.0		mg/Kg		81	70 - 130	1	20
0.10, 0.00)											

C10-C28)

	MSD	MSD			
Surrogate	%Recovery	Qualifier	Limits		
1-Chlorooctane	82		70 - 130		
o-Terphenyl	91		70 - 130		

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-33690/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33886

Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			09/07/22 16:56	1

Lab Sample ID: LCS 880-33690/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33886

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	261.9	-	mg/Kg		105	90 - 110	

Lab Sample ID: LCSD 880-33690/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33886

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	261.6		mg/Kg		105	90 - 110	0	20	

Client Sample ID: FS11 Lab Sample ID: 890-2875-11 MS **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 33886

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	2300		1240	3640		ma/Ka		108	90 110	

Lab Sample ID: 890-2875-11 MSD Client Sample ID: FS11 **Prep Type: Soluble**

Matrix: Solid Analysis Batch: 33886

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limits RPD Limit Analyte %Rec Unit 2300 1240 3642 108 Chloride 90 - 110 mg/Kg

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike

Job ID: 890-2875-1 Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-33691/1-A

Matrix: Solid

Analysis Batch: 33933

мв мв

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

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

Matrix: Solid

Analysis Batch: 33933

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

Lab Sample ID: LCSD 880-33691/3-A

Matrix: Solid

Analysis Batch: 33933

Spike LCSD LCSD RPD %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 241.4 mg/Kg 90 - 110

Lab Sample ID: 890-2872-A-1-C MS

Matrix: Solid

Analysis Batch: 33933

MS MS Sample Sample Spike %Rec Added Analyte Result Qualifier Result Qualifier Unit %Rec Limits Chloride 2280 1260 3628 107 90 - 110 mg/Kg

Lab Sample ID: 890-2872-A-1-D MSD

Matrix: Solid

Analysis Batch: 33933

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 2280 1260 3643 mg/Kg 108 90 - 110 20

Lab Sample ID: 890-2874-A-3-C MS

Matrix: Solid

Analysis Batch: 33933

Sample Sample Spike MS MS %Rec Result Qualifier Added Analyte Result Qualifier Unit D %Rec Limits Chloride 541 251 769.3 mg/Kg 90 - 110

Lab Sample ID: 890-2874-A-3-D MSD

Matrix: Solid

Analysis Batch: 33933

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

Client: Ensolum

Job ID: 890-2875-1 SDG: 03E1558053

GC VOA

Prep Batch: 34093

Project/Site: PLU 21 BD 104

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-34093/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 34105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Total/NA	Solid	5035	
890-2875-2	FS02	Total/NA	Solid	5035	
890-2875-3	FS03	Total/NA	Solid	5035	
890-2875-4	FS04	Total/NA	Solid	5035	
890-2875-5	FS05	Total/NA	Solid	5035	
890-2875-6	FS06	Total/NA	Solid	5035	
890-2875-7	FS07	Total/NA	Solid	5035	
890-2875-8	FS08	Total/NA	Solid	5035	
890-2875-9	FS09	Total/NA	Solid	5035	
890-2875-10	FS10	Total/NA	Solid	5035	
890-2875-11	FS11	Total/NA	Solid	5035	
MB 880-34105/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Total/NA	Solid	8021B	34105
890-2875-2	FS02	Total/NA	Solid	8021B	34105
890-2875-3	FS03	Total/NA	Solid	8021B	34105
890-2875-4	FS04	Total/NA	Solid	8021B	34105
890-2875-5	FS05	Total/NA	Solid	8021B	34105
890-2875-6	FS06	Total/NA	Solid	8021B	34105
890-2875-7	FS07	Total/NA	Solid	8021B	34105
890-2875-8	FS08	Total/NA	Solid	8021B	34105
890-2875-9	FS09	Total/NA	Solid	8021B	34105
890-2875-10	FS10	Total/NA	Solid	8021B	34105
890-2875-11	FS11	Total/NA	Solid	8021B	34105
MB 880-34093/5-A	Method Blank	Total/NA	Solid	8021B	34093
MB 880-34105/5-A	Method Blank	Total/NA	Solid	8021B	34105
LCS 880-34105/1-A	Lab Control Sample	Total/NA	Solid	8021B	34105
LCSD 880-34105/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34105
890-2862-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	34105
890-2862-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34105

Analysis Batch: 34258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Total/NA	Solid	Total BTEX	-
890-2875-2	FS02	Total/NA	Solid	Total BTEX	
890-2875-3	FS03	Total/NA	Solid	Total BTEX	
890-2875-4	FS04	Total/NA	Solid	Total BTEX	
890-2875-5	FS05	Total/NA	Solid	Total BTEX	
890-2875-6	FS06	Total/NA	Solid	Total BTEX	
890-2875-7	FS07	Total/NA	Solid	Total BTEX	
890-2875-8	FS08	Total/NA	Solid	Total BTEX	

Client: Ensolum

Project/Site: PLU 21 BD 104

Job ID: 890-2875-1 SDG: 03E1558053

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GC VOA (Continued)

Analysis Batch: 34258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-9	FS09	Total/NA	Solid	Total BTEX	
890-2875-10	FS10	Total/NA	Solid	Total BTEX	
890-2875-11	FS11	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 33656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Total/NA	Solid	8015NM Prep	
890-2875-2	FS02	Total/NA	Solid	8015NM Prep	
890-2875-3	FS03	Total/NA	Solid	8015NM Prep	
890-2875-4	FS04	Total/NA	Solid	8015NM Prep	
890-2875-5	FS05	Total/NA	Solid	8015NM Prep	
890-2875-6	FS06	Total/NA	Solid	8015NM Prep	
890-2875-7	FS07	Total/NA	Solid	8015NM Prep	
890-2875-8	FS08	Total/NA	Solid	8015NM Prep	
890-2875-9	FS09	Total/NA	Solid	8015NM Prep	
890-2875-10	FS10	Total/NA	Solid	8015NM Prep	
890-2875-11	FS11	Total/NA	Solid	8015NM Prep	
MB 880-33656/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-33656/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-33656/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2875-1 MS	FS01	Total/NA	Solid	8015NM Prep	
890-2875-1 MSD	FS01	Total/NA	Solid	8015NM Prep	

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Analysis Batch: 33684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Total/NA	Solid	8015B NM	33656
890-2875-2	FS02	Total/NA	Solid	8015B NM	33656
890-2875-3	FS03	Total/NA	Solid	8015B NM	33656
890-2875-4	FS04	Total/NA	Solid	8015B NM	33656
890-2875-5	FS05	Total/NA	Solid	8015B NM	33656
890-2875-6	FS06	Total/NA	Solid	8015B NM	33656
890-2875-7	FS07	Total/NA	Solid	8015B NM	33656
890-2875-8	FS08	Total/NA	Solid	8015B NM	33656
890-2875-9	FS09	Total/NA	Solid	8015B NM	33656
890-2875-10	FS10	Total/NA	Solid	8015B NM	33656
890-2875-11	FS11	Total/NA	Solid	8015B NM	33656
MB 880-33656/1-A	Method Blank	Total/NA	Solid	8015B NM	33656
LCS 880-33656/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	33656
LCSD 880-33656/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	33656
890-2875-1 MS	FS01	Total/NA	Solid	8015B NM	33656
890-2875-1 MSD	FS01	Total/NA	Solid	8015B NM	33656

Analysis Batch: 33811

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-2875-1	FS01	Total/NA	Solid	8015 NM
890-2875-2	FS02	Total/NA	Solid	8015 NM
890-2875-3	FS03	Total/NA	Solid	8015 NM
890-2875-4	FS04	Total/NA	Solid	8015 NM
890-2875-5	FS05	Total/NA	Solid	8015 NM

 Client: Ensolum
 Job ID: 890-2875-1

 Project/Site: PLU 21 BD 104
 SDG: 03E1558053

GC Semi VOA (Continued)

Analysis Batch: 33811 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-6	FS06	Total/NA	Solid	8015 NM	
890-2875-7	FS07	Total/NA	Solid	8015 NM	
890-2875-8	FS08	Total/NA	Solid	8015 NM	
890-2875-9	FS09	Total/NA	Solid	8015 NM	
890-2875-10	FS10	Total/NA	Solid	8015 NM	
890-2875-11	FS11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 33690

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-9	FS09	Soluble	Solid	DI Leach	
890-2875-10	FS10	Soluble	Solid	DI Leach	
890-2875-11	FS11	Soluble	Solid	DI Leach	
MB 880-33690/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33690/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33690/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2875-11 MS	FS11	Soluble	Solid	DI Leach	
890-2875-11 MSD	FS11	Soluble	Solid	DI Leach	

Leach Batch: 33691

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Soluble	Solid	DI Leach	
890-2875-2	FS02	Soluble	Solid	DI Leach	
890-2875-3	FS03	Soluble	Solid	DI Leach	
890-2875-4	FS04	Soluble	Solid	DI Leach	
890-2875-5	FS05	Soluble	Solid	DI Leach	
890-2875-6	FS06	Soluble	Solid	DI Leach	
890-2875-7	FS07	Soluble	Solid	DI Leach	
890-2875-8	FS08	Soluble	Solid	DI Leach	
MB 880-33691/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-33691/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-33691/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2872-A-1-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2872-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	
890-2874-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-2874-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 33886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-9	FS09	Soluble	Solid	300.0	33690
890-2875-10	FS10	Soluble	Solid	300.0	33690
890-2875-11	FS11	Soluble	Solid	300.0	33690
MB 880-33690/1-A	Method Blank	Soluble	Solid	300.0	33690
LCS 880-33690/2-A	Lab Control Sample	Soluble	Solid	300.0	33690
LCSD 880-33690/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33690
890-2875-11 MS	FS11	Soluble	Solid	300.0	33690
890-2875-11 MSD	FS11	Soluble	Solid	300.0	33690

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 Client: Ensolum
 Job ID: 890-2875-1

 Project/Site: PLU 21 BD 104
 SDG: 03E1558053

HPLC/IC

Analysis Batch: 33933

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2875-1	FS01	Soluble	Solid	300.0	33691
890-2875-2	FS02	Soluble	Solid	300.0	33691
890-2875-3	FS03	Soluble	Solid	300.0	33691
890-2875-4	FS04	Soluble	Solid	300.0	33691
890-2875-5	FS05	Soluble	Solid	300.0	33691
890-2875-6	FS06	Soluble	Solid	300.0	33691
890-2875-7	FS07	Soluble	Solid	300.0	33691
890-2875-8	FS08	Soluble	Solid	300.0	33691
MB 880-33691/1-A	Method Blank	Soluble	Solid	300.0	33691
LCS 880-33691/2-A	Lab Control Sample	Soluble	Solid	300.0	33691
LCSD 880-33691/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	33691
890-2872-A-1-C MS	Matrix Spike	Soluble	Solid	300.0	33691
890-2872-A-1-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33691
890-2874-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	33691
890-2874-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	33691

1

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11

14

4 1

Job ID: 890-2875-1

Client: Ensolum Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS01 Lab Sample ID: 890-2875-1

Date Collected: 08/31/22 12:30 **Matrix: Solid** Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 07:38	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 12:01	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	33933	09/09/22 03:54	CH	EET MID

Client Sample ID: FS02 Lab Sample ID: 890-2875-2

Date Collected: 08/31/22 12:35 Matrix: Solid Date Received: 09/01/22 09:21

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 5.01 g 5 mL 34105 09/09/22 12:34 MR EET MID Total/NA 8021B 5 mL 09/11/22 07:58 **EET MID** Analysis 1 5 mL 34151 MR Total/NA Total BTEX 34258 09/12/22 10:03 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 33811 09/06/22 09:47 SM **EET MID** Total/NA 33656 Prep 8015NM Prep 10.03 g 10 mL 09/02/22 15:07 DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 33684 09/03/22 13:05 SM **EET MID** Soluble 09/03/22 13:12 KS Leach DI Leach 5.02 g 50 mL 33691 **EET MID** Soluble Analysis 300.0 5 50 mL 50 mL 33933 09/09/22 04:09 СН **EET MID**

Client Sample ID: FS03 Lab Sample ID: 890-2875-3

Date Collected: 08/31/22 12:40 **Matrix: Solid** Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 08:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 13:25	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 04:14	CH	EET MID

Lab Sample ID: 890-2875-4 **Client Sample ID: FS04**

Matrix: Solid Date Collected: 08/31/22 12:45 Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 08:39	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID

Client: Ensolum

Project/Site: PLU 21 BD 104

Job ID: 890-2875-1 SDG: 03E1558053

Client Sample ID: FS04

Lab Sample ID: 890-2875-4

Matrix: Solid

Date Collected: 08/31/22 12:45 Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 13:45	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	33933	09/09/22 04:18	CH	EET MID

Lab Sample ID: 890-2875-5

Matrix: Solid

Date Collected: 08/31/22 12:50 Date Received: 09/01/22 09:21

Client Sample ID: FS05

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 09:00	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 14:06	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 04:23	CH	EET MID

Client Sample ID: FS06 Lab Sample ID: 890-2875-6 Date Collected: 08/31/22 12:55

Matrix: Solid Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 10:49	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 14:26	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	33691	09/03/22 13:12	KS	EET MID
Soluble	Analysis	300.0		1	50 mL	50 mL	33933	09/09/22 04:28	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-2875-7

Date Collected: 08/31/22 13:00 Date Received: 09/01/22 09:21

_	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 11:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	33656 33684	09/02/22 15:07 09/03/22 14:46	DM SM	EET MID EET MID

Eurofins Carlsbad

Matrix: Solid

Client: Ensolum

Project/Site: PLU 21 BD 104

Job ID: 890-2875-1 SDG: 03E1558053

Client Sample ID: FS07

Lab Sample ID: 890-2875-7 Date Collected: 08/31/22 13:00 Date Received: 09/01/22 09:21

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Method Prep Type Туре Run Factor Amount Amount Number or Analyzed Analyst Lab Soluble DI Leach 33691 Leach 4.97 g 50 mL 09/03/22 13:12 KS **EET MID** 300.0 Soluble Analysis 5 50 mL 50 mL 33933 09/09/22 04:33 СН **EET MID**

Client Sample ID: FS08 Lab Sample ID: 890-2875-8

Date Collected: 08/31/22 13:05 Matrix: Solid

Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.99 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 11:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 15:06	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33691	09/03/22 13:12	KS	EET MIC
Soluble	Analysis	300.0		5	50 mL	50 mL	33933	09/09/22 08:53	CH	EET MID

Client Sample ID: FS09 Lab Sample ID: 890-2875-9

Date Collected: 08/31/22 13:10 **Matrix: Solid** Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 11:50	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 15:27	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	33690	09/03/22 13:21	KS	EET MID
Soluble	Analysis	300.0		10			33886	09/07/22 18:38	CH	EET MID

Client Sample ID: FS10 Lab Sample ID: 890-2875-10

Date Collected: 08/31/22 13:15 Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 12:11	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 15:47	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	33690	09/03/22 13:21	KS	EET MID
Soluble	Analysis	300.0		1			33886	09/07/22 18:43	CH	EET MID

Eurofins Carlsbad

Matrix: Solid

Lab Chronicle

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104 SDG: 03E1558053

Client Sample ID: FS11 Lab Sample ID: 890-2875-11 Date Collected: 08/31/22 13:20

Matrix: Solid

Date Received: 09/01/22 09:21

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34105	09/09/22 12:34	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34151	09/11/22 12:31	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34258	09/12/22 10:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			33811	09/06/22 09:47	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	33656	09/02/22 15:07	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	33684	09/03/22 16:27	SM	EET MID
Soluble	Leach	DI Leach			5.04 g	50 mL	33690	09/03/22 13:21	KS	EET MID
Soluble	Analysis	300.0		5			33886	09/07/22 18:48	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2875-1 Project/Site: PLU 21 BD 104

SDG: 03E1558053

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date
Texas	NE	ELAP	T104704400-22-24	06-30-23
The following analytes	are included in this report, bu	ut the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes fo
the agency does not of	fer certification.	•	, , ,	,
the agency does not of Analysis Method	fer certification. Prep Method	Matrix	Analyte	,
0 ,		Matrix Solid	Analyte Total TPH	

Method Summary

Client: Ensolum Project/Site: PLU 21 BD 104 Job ID: 890-2875-1

SDG: 03E1558053

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Sample Summary

Client: Ensolum

Project/Site: PLU 21 BD 104

Job ID: 890-2875-1

SDG: 03E1558053

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2875-1	FS01	Solid	08/31/22 12:30	09/01/22 09:21	1
890-2875-2	FS02	Solid	08/31/22 12:35	09/01/22 09:21	1
890-2875-3	FS03	Solid	08/31/22 12:40	09/01/22 09:21	1
890-2875-4	FS04	Solid	08/31/22 12:45	09/01/22 09:21	1
890-2875-5	FS05	Solid	08/31/22 12:50	09/01/22 09:21	1
890-2875-6	FS06	Solid	08/31/22 12:55	09/01/22 09:21	1
890-2875-7	FS07	Solid	08/31/22 13:00	09/01/22 09:21	1
890-2875-8	FS08	Solid	08/31/22 13:05	09/01/22 09:21	1
890-2875-9	FS09	Solid	08/31/22 13:10	09/01/22 09:21	1
890-2875-10	FS10	Solid	08/31/22 13:15	09/01/22 09:21	1
890-2875-11	FS11	Solid	08/31/22 13:20	09/01/22 09:21	1

Revised Date: 08/25/2020 Rev. 2020

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time

Received by: (Signature)

(Signature)

fished by

service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. titlee. 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

Chain of Custody

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

Environment Testing

eurofins 🛟

Xenco

Work Order No:

Project Manager: Ben Belill	3elill			Bill to: (if different)		Garret Green	reen		Work	Work Order Comments
	mn			Company Name:		XTO Energy	ergy		Program: UST/PST PRP	Program: UST/PST ☐ PRP☐ Brownflelds ☐ RRC ☐ Superfund ☐
	3122 National Parks Hwy	Hwy		Address:		3104 E.	3104 E. Green St.		State of Project:	
e ZIP:	Carlsbad, NM 88220			City, State ZIP:		Carlsbac	Carlsbad, NM 88220	0.	Reporting: Level II Level II	Reporting: Level II
	303-887-2946		Email: Gar		er.Green@ExxonMobil.com	nWobil.	wo;		Deliverables: EDD	ADaPT Comer:
Project Name:	PLU 21 BD 104	40	Turn	Turn Around				ANALYSIS REQUEST	REQUEST	Preservative Codes
Project Number:	03E1558053	33	✓ Routine	□ Rush	Pres. Code					None: NO DI Water: H ₂ O
Project Location:	32.10990, -103.88862	88862	Due Date:							_
Sampler's Name:	Kase Parker	3r	TAT starts the day	s day received by	Λc					
PO#:			the lab, if rec	eived by 4:30pm	_			_		H ₂ S0 ₄ : H ₂ NaOH: Na
SAMPLE RECEIPT	Temp Blank:	ov (se)	Wet Ice:	ON (SOY)	eten	(0.				H ₃ PO ₄ : HP
Samples Received Intact:	Ves No	Thermometer ID:	ir ID:	JAN OOF		300				NaHSO4: NABIS
Cooler Custody Seals:	Yes No CATA	No (NA Correction Factor:	actor:	-0.8	² d	:44				Na ₂ S ₂ O ₃ : NaSO ₃
Sample Custody Seals:	Yes No WA	Temperature Reading:	Reading:	9		+		Control of Chair of Custody	in of Custody	Zn Acetate+NaOH: Zn
Total Containers:		Corrected Temperature:	emperature:	7		-	-	880-787-068		NaOH+Ascorbic Acid: SAPC
Sample Identification	ion Matrix	Date Sampled	Time Sampled	Depth Comp	Grab/ # of Comp Cont	снго	8) нчт) хэта			Sample Comments
FS01	S	8/31/2022	12:30	1.		×	×			Incident ID:
FS02	S	8/31/2022	12:35	1,		×	×			nAPP2210942764
FS03	S	8/31/2022	12:40	1.		×	×			Cost Center:
FS04	S	8/31/2022	12:45	1,		×	×			1666351001
FS05	S	8/31/2022	12:50	1-		×	×			AFE:
FS06	S	8/31/2022	12:55	1-		×	×			
FS07	S	8/31/2022	13:00	1-		×	×			
FS08	S	8/31/2022	13:05	٦.		×	×			
FS09	S	8/31/2022	13:10	-		×	×			
FS10	S	8/31/2022	13:15	-		×	×			

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Chain of Custody

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

Work Order No:

								CO.COLLOV.MAM	- C- : : : : : : : : : : : : : : : : : :	
Project Manager: Ben	Ben Belill		Bill to: (if different)		Garret Green			Work Order	Work Order Comments	
	mnlc		Company Name:		XTO Energy		Pro	Program: UST/PST 🗌 PRP 🗌 Brownfields 🗌 RRC 📋 Superfund 🗍	ownfields RRC	Superfund [
	3122 National Parks Hwy		Address:		3104 E. Green St	St.	Star	State of Project:		
le ZIP:	Carlsbad, NM 88220		City, State ZIP:	Cal	Carlsbad, NM 88220	88220	Rep	Nel III	PST/UST TRRP	Level IV
	303-887-2946	Email:	Garret.	Green@ExxonMobil.com	obil.com		Deli	Deliverables: EDD 🔲 ADa	ADaPT 🗀 Other:	
Project Name	PI 11 21 BD 104	Turn	Turn Around				ANALYSIS REQUEST	_	Preservative Codes	e Codes
Project Number:	03E1558053	☑ Routine	□ Rush	Pres.					None: NO	DI Water: H ₂ O
Project Location:	32.10990, -103.88862	Due Date:							Cool: Cool	MeOH: Me
Sampler's Name:	Kase Parker	TAT starts the	TAT starts the day received by							HNO3: HN
PO#:		the lab, if received by	seived by 4:30pm	SJ					H ₂ S04: H ₂	NaOH: Na
SAMPLE RECEIPT	Temp Blank: Yes No	o Werfice:	Yes No	ətər (0.	,				H₃PO4: HP	
Samples Received Intact:	Yes No Thermometer ID:	efer ID:							NaHSO4: NABIS	
Cooler Custody Seals:	Yes No N/A Gorrection Factor	n Factor	/						Na ₂ S ₂ O ₃ : NaSO ₃	
Sample Custody Seals:	N DA	Temperature Reading:		(E)					Zn Acetate+NaOH: Zn	Zu
Total Containers:		Corrected Temperature:		DES	15)	120			NaOH+Ascorbic Acid: SAPC	sid: SAPC
Sample Identification	ition Matrix Sampled	Time	Depth Grab/	CHLORI C #	08) НЧТ	8) X3T8			Sample Comments	nments
FS11	S 8/31/2022		-		×	×			Incident ID:	
									nAPP2210942764	942764
	1								Cost Center:	
									1666351001	1001
				11	C				AFE:	
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Circle Method(s) and Metal(s) to be analyzed	etal(s) to be analyzed	TCLP / SPLP 60	PLP 6010: 8RCRA	CRA Sb	As Ba Be	Se Cd Cr Co C	Co Cu Pb Mn Mo Ni Se Ag	Ag TI U Hg: 1631 /	11/245.1/7470 /747	171
Notice: Signature of this docum of service. Eurofins Xenco will it of Eurofins Xenco. A minimum of	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 Eurofins Xenco, A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotia	constitutes a valid s and shall not ass ach project and a c	purchase order from ume any responsibil harge of \$5 for each	ctient comp ity for any ic sample sub	sany to Eurofil sases or exper mitted to Euro	ns Xenco, its affillate nses incurred by the ofins Xenco, but not a	s and subcontractors. It ass client if such losses are due malyzed. These terms will by	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	.pe	
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eurofins ::

9/12/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2875-1 SDG Number: 03E1558053

Login Number: 2875 List Source: Eurofins Carlsbad

List Number: 1 Creator: Clifton, Cloe

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

Login Sample Receipt Checklist

Client: Ensolum Job N

Job Number: 890-2875-1 SDG Number: 03E1558053

List Source: Eurofins Midland
List Number: 2
List Creation: 09/02/22 10:54 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



APPENDIX E

NMOCD Notifications

From: <u>Green, Garrett J</u>

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us; Hamlet, Robert, EMNRD

Cc: Tacoma Morrissey

Subject: XTO - Sampling Notification (Week of 8/29/22 - 9/2/22)

Date: Friday, August 26, 2022 3:15:37 PM

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of August 29, 2022.

Monday

- Brushy Draw West 25 / nAPP2216138431
- Big Sinks 2-24-30 / nAPP2219644709 & nAPP2220224382

Tuesday

- Brushy Draw West 25 / nAPP2216138431
- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- ADU 816/ NAB1435334641

Wednesday

- Brushy Draw West 25 / nAPP2216138431
- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- ADU 816/ NAB1435334641
- PLU Pierce Canyon 12 / nAPP2222044186

Thursday

- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- JRU DI2/ nAPP2211654411 & nAPP2208349430

Friday

- PLU 21 BD 123-124 & 104 / nAPP2211651017, nAPP2211151438, nAPP2210942764, & nAPP2209736479
- PLU S Frac Pond / nAPP2211150068

Thank you!

Garrett Green

Environmental Coordinator Delaware Business Unit (575) 200-0729

Garrett.Green@ExxonMobil.com

XTO Energy, Inc.

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

Date:

From: Collins, Melanie To: DelawareSpills /SM Cc: Aimee Cole; Ben Belill

Subject: FW: (Extension Approval) - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379, nAPP2210942764,

nAPP221651017, nAPP2211151438

Thursday, June 23, 2022 4:38:46 PM Attachments: image002.png

[**EXTERNAL EMAIL**]

From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]

Sent: Thursday, June 23, 2022 3:27 PM

To: Collins, Melanie <melanie.collins@exxonmobil.com>

Subject: (Extension Approval) - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379,

nAPP2210942764, nAPP221651017, nAPP2211151438

External Email - Think Before You Click

RE: Incident #NAPP2209736479, NAPP2210942764, NAPP221651017, NAPP2211151438

Melanie,

Your request for an extension to **September 21st, 2022** is approved. Please include this e-mail correspondence in the remediation and/or closure report.

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210 575.909.0302 | robert.hamlet@state.nm.us http://www.emnrd.state.nm.us/OCD/



From: Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Thursday, June 23, 2022 2:15 PM

To: Hamlet, Robert, EMNRD < Robert.Hamlet@state.nm.us>

Subject: RE: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

My apologies for that. The correct incident number for the 3/25/2022 spill should be nAPP2209736479.

Thank you, Melanie Collins

From: Hamlet, Robert, EMNRD [mailto:Robert.Hamlet@state.nm.us]

Sent: Thursday, June 23, 2022 3:11 PM

To: Collins, Melanie < <u>melanie.collins@exxonmobil.com</u> >

Subject: RE: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

External Email - Think Before You Click

Melanie,

The incident nAPP22097363379 has one too many numbers. What's the correct incident number? Thanks

Robert Hamlet • Environmental Specialist - Advanced

Environmental Bureau
EMNRD - Oil Conservation Division
811 S. First Street | Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us
http://www.emnrd.state.nm.us/OCD/



From: Collins, Melanie < melanie.collins@exxonmobil.com >

Sent: Thursday, June 23, 2022 7:46 AM

To: Enviro, OCD, EMNRD < CCD.Enviro@state.nm.us>; Bratcher, Mike, EMNRD

<<u>mike.bratcher@state.nm.us</u>>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>

Cc: Pennington, Shelby G <<u>shelby.g.pennington@exxonmobil.com</u>>; DelawareSpills /SM

<<u>DelawareSpills@exxonmobil.com</u>>; <u>acole@ensolum.com</u>; <u>bbelill@ensolum.com</u>

Subject: [EXTERNAL] XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H /

nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

XTO - Extension Request - PLU 21 BD 104H(2), 123H and 124H / nAPP22097363379, nAPP2210942764, nAPP221651017, nAPP2211151438

XTO is requesting an extension of the current deadlines of June 23, 2022, July 4, 2022, July 7, 2022, and July 14, 2022, for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC for the Poker Lake Unit 21 BD 104H(2), 124H, and 123H (Incident Numbers nAPP22097363379, nAPP2210942764, nAPP2211151438 and nAPP221651017). The four releases are located on the same well pad and occurred during frac operations on March 25, 2022, April 5, 2022, April 8, 2022, and April 15, 2022, respectively. Initial assessment of the release areas has been completed, however; remediation work could not begin until frac operations were complete. XTO operations provided notification that the pad was clear, and additional site assessment was completed on June 17, 2022. Based on the most recent analytical results, additional remediation activities are required. In order to complete the remediation activities and submit a remediation work plan or closure request, XTO is requesting a 90-day extension until September 21, 2022.

Thank you,

Melanie Collins



Environmental Technician

melanie.collins@exxonmobil.com

432-556-3756



APPENDIX F

Friction Reducer SDS



APPENDIX F

Friction Reducer Safety Data Sheet



SAFETY DATA SHEET

Issuing Date 01-Aug-2019 Revision Date 01-Aug-2019 Revision Number 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name POLYglide Xcel-200

Other means of identification

Product Code(s) 10497

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use No information available

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address Manufacturer Address

PfP Industries PfP Industries 29738 Goynes Rd. 29738 Goynes Rd. Katy, TX 77493 Katy, TX 77493

Emergency telephone number

Company Phone Number 281-371-2000

Emergency Telephone Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids Category 4

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Combustible liquid

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Revision Date 01-Aug-2019

Appearance Opaque Physical state Liquid Odor Mineral Oil

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Information

May be harmful in contact with skin Harmful to aquatic life

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Chemical name	CAS No	Weight-%	Trade secret
Petroleum distillates, hydrotreated light	64742-47-8	40 - 70	

^{*}The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep

eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present

and easy to do. Continue rinsing.

Skin contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

Ingestion Clean mouth with water and drink afterwards plenty of water.

Self-protection of the first aider Remove all sources of ignition. Ensure that medical personnel are aware of the material(s)

involved, take precautions to protect themselves and prevent spread of contamination.

Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

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Revision Date 01-Aug-2019

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media Dry chemical. Carbon dioxide (CO2). Water spray. Alcohol resistant foam.

Unsuitable extinguishing media CAUTION: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the

chemical

Keep product and empty container away from heat and sources of ignition. In the event of

fire, cool tanks with water spray.

Explosion data

Sensitivity to Mechanical Impact None. Sensitivity to Static Discharge None.

Special protective equipment for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See

section 8 for more information. Take precautionary measures against static discharges. Do

not touch or walk through spilled material.

Environmental precautions

Environmental precautions Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage

if safe to do so.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far

ahead of liquid spill for later disposal.

Methods for cleaning up Take precautionary measures against static discharges. Dam up. Soak up with inert

absorbent material. Pick up and transfer to properly labeled containers.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat,

hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use with local exhaust ventilation.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from

heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Store in accordance with the particular

national regulations. Store in accordance with local regulations.

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8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or

level that contributes to the hazard classification of the mixture) which have an exposure

limit applicable in the region for which this safety data sheet is intended or other

recommended limit. At this time, the other relevant constituents have no known exposure

limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers

> Evewash stations Ventilation systems.

Individual protection measures, such as personal protective equipment

Eve/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.

Do not eat, drink or smoke when using this product. Contaminated work clothing should not General hygiene considerations

> be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid **Appearance** Opaque

Color Milky white to yellow

Odor Mineral Oil

Odor threshold No information available

Remarks • Method Property Values

Hq 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

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 - 1.03Water 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

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Revision Date 01-Aug-2019

Other Information

Softening point
Molecular weight
VOC Content (%)
Liquid Density
No information available

10. STABILITY AND REACTIVITY

Reactivity No information available.

Chemical stability Stable under normal conditions.

Possibility of hazardous reactions None under normal processing.

Conditions to avoid Heat, flames and sparks.

Incompatible materials None known based on information supplied.

Hazardous decomposition products None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available.

Eye contact Specific test data for the substance or mixture is not available.

Skin contact Specific test data for the substance or mixture is not available.

Ingestion Specific test data for the substance or mixture is not available.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

ATEmix (oral) 5,005.00 mg/kg
ATEmix (dermal) 2,002.00 mg/kg
ATEmix (inhalation-dust/mist) 5.20 mg/l

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Petroleum distillates, hydrotreated light 64742-47-8	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 5.2 mg/L (Rat)4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation No information available.

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Serious eye damage/eye irritation No information available.

Respiratory or skin sensitization No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Aspiration hazard No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Petroleum distillates, hydrotreated light 64742-47-8		2.4: 96 h Oncorhynchus mykiss mg/L LC50 static 45: 96 h Pimephales promelas mg/L LC50 flow-through 2.2: 96 h Lepomis macrochirus mg/L LC50 static		4720: 96 h Den-dronereides heteropoda mg/L LC50

Persistence and degradability No information available.

Bioaccumulation There is no data for this product.

Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused

products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT Not regulated. Product does not sustain combustion (49 CFR 173.120(b)(3))

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL/NDSL Complies
EINECS/ELINCS Complies
ENCS Does not comply
IECSC Complies
KECL Complies

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PICCS Complies AICS Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

US State Regulations

This product does not contain any substances regulated by state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

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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-2019

Revision Date 01-Aug-2019

Revision Note No information available.

Disclaimer

The data supplied herein is for use only in connection with occupational safety and health. The information provided in this Safety Data Sheet is believed to be correct as of the date issued. Updates to this information may be obtained by contacting (either reference contact location or website). PfP Industries MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. This information is not meant to be an all-inclusive document on worldwide hazard communication regulations. Each user of the material described herein must evaluate the conditions of use and design, many of which will be solely within the user's knowledge and control, and the appropriate protective actions, including proper notification and training of employees, necessary to prevent employee exposures, property damage or release to the environment.

End of Safety Data Sheet

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

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

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

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

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

CONDITIONS

Action 145405

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	145405
	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 #NAPP2210942764 PLU 21 BRUSHY DRAW 104H, thank you. This closure is approved.	12/13/2022