te of New Mexico

Incident ID	NAPP2123634554
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 ite	ms must be included in the closure report.
A scaled site and sampling diagram as described in 19.15.29.11	NMAC
Photographs of the remediated site prior to backfill or photos o must be notified 2 days prior to liner inspection)	f the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate ODC)	District office must be notified 2 days prior to final sampling)
☐ Description of remediation activities	
and regulations all operators are required to report and/or file certain may endanger public health or the environment. The acceptance of a should their operations have failed to adequately investigate and reme human health or the environment. In addition, OCD acceptance of a compliance with any other federal, state, or local laws and/or regulative restore, reclaim, and re-vegetate the impacted surface area to the concaccordance with 19.15.29.13 NMAC including notification to the OC Printed Name:Garrett Green	ediate contamination that pose a threat to groundwater, surface water, C-141 report does not relieve the operator of responsibility for ons. The responsible party acknowledges they must substantially ditions that existed prior to the release or their final land use in CD when reclamation and re-vegetation are complete. itle: Environmental Coordinator
OCD Only	
Received by: Jocelyn Harimon	Date: 11/18/2022
	f liability should their operations have failed to adequately investigate and ater, human health, or the environment nor does not relieve the responsible regulations.
Closure Approved by: Robert Hamlet	Date: <u>2/15/2023</u>
Printed Name: Robert Hamlet	Title: Environmental Specialist - Advanced

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

State of New Mexico Energy Minerals and Natural Resources Department

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

Incident ID	NAPP2123634554
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Facility ID	
Application ID	

Release Notification

Responsible Party

Responsible I	Party XTO) Energy		OGRID 5	
			Telephone 281-723-9353		
		nington@exxonm	obil.com		(assigned by OCD)
			Rd Bldg 5, Midlar	nd, Texas, 79707	
				of Release So	ource
Latitude 32.5	3378		(NAD 83 in dec	Longitude _ imal degrees to 5 decim	-104.20753
G: N			(17112 05 m dec		
		ware Unit 624			roduction Well
Date Release l	Discovered	8/10/2021		API# (if app	licable)
Unit Letter	Section	Township	Range	Coun	ty
D	32	20S	28E	Eddy	y
	Materia	l(s) Released (Select al	l that apply and attach	Volume of I	justification for the volumes provided below)
Crude Oil		Volume Release	d (bbls) 0.38		Volume Recovered (bbls) 0
roduced Produced	Water	Volume Release	d (bbls) 8.21		Volume Recovered (bbls) 0
Is the concentration of total dissolved solids (TDS) in the produced water >10,000 mg/l?			Yes No		
Condensate Volume Released (bbls)			Volume Recovered (bbls)		
☐ Natural Ga	as	Volume Release	d (Mcf)		Volume Recovered (Mcf)
Other (des	scribe)	Volume/Weight	Released (provide	units)	Volume/Weight Recovered (provide units)
Cause of Rele	ease Lease o remedia	perator discovered	d fluids releasing fi	rom a corroded flov	w line. A third-party contractor has been retained for

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Page 2 Oil Conservation Division

73	73	- 0		C 4	FO
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-	450	بحره	w	,,	0

Incident ID	NAPP2123634554
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Facility ID	
Application ID	

Was this a major	If YES, for what reason(s) does the respon	nsible party consider this a major release?
release as defined by	N/A	
19.15.29.7(A) NMAC?		
Yes 🗷 No		
If YES, was immediate n	otice given to the OCD? By whom? To wh	nom? When and by what means (phone, email, etc)?
	Initial R	esponse
The responsible	party must undertake the following actions immediatel	y unless they could create a safety hazard that would result in injury
➤ The source of the rele	ease has been stopped.	
	as been secured to protect human health and	the environment.
<u> </u>	_	likes, absorbent pads, or other containment devices.
■ All free liquids and re	ecoverable materials have been removed an	d managed appropriately.
If all the actions describe	d above have <u>not</u> been undertaken, explain	why:
NA		
Per 19.15.29.8 B. (4) NM	IAC the responsible party may commence r	emediation immediately after discovery of a release. If remediation
		efforts have been successfully completed or if the release occurred
		lease attach all information needed for closure evaluation.
		best of my knowledge and understand that pursuant to OCD rules and fications and perform corrective actions for releases which may endanger
public health or the environ	ment. The acceptance of a C-141 report by the C	OCD does not relieve the operator of liability should their operations have
		at to groundwater, surface water, human health or the environment. In responsibility for compliance with any other federal, state, or local laws
and/or regulations.	•	
Printed Name: Adrian Ba	aker	Title: SSHE Coordinator
Signature:	rian Dako	Date: 8/24/21
	conmobil.com	Telephone: 432-236-3808
email:		Telephone:
OCD Only		
Received by: Ramon	a Marcus	Date: 8/24/2021
, <u> </u>		

NAPP2123634554

Location:	Avalon Delaware Unit 624		
Spill Date:	8/10/2021		
	Area 1		
Approximate A	rea =	724.00	sq. ft.
Average Satura	tion (or depth) of spill =	4.00	inches
Average Porosi	ty Factor =	0.20	
	VOLUME OF LEAK		
Total Crude Oil	=	0.38	bbls
Total Produced	Water =	8.21	bbls
	TOTAL VOLUME OF LEAK		
Total Crude Oi	=	0.38	bbls
Total Produced	Water =	8.21	bbls
TOTAL VOLUME RECOVERED			
Total Crude Oi	=	0.00	bbls
Total Produced	Water =	0.00	bbls

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

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

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

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

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

CONDITIONS

Action 44037

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	44037
	Action Type:
	[C-141] Release Corrective Action (C-141)

CONDITIONS

Created By	Condition	Condition Date
rmarcus	None	8/24/2021

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Incident ID	NAPP2123634554	
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Site Assessment/Characterization

Inis information must be provided to the appropriate district office no later than 90 days after the release discovery date.			
What is the shallowest depth to groundwater beneath the area affected by the release?	<u>>100</u> (ft bgs)		
Did this release impact groundwater or surface water?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a continuously flowing watercourse or any other significant watercourse?	☐ Yes ⊠ No		
Are the lateral extents of the release within 200 feet of any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of an occupied permanent residence, school, hospital, institution, or church?	☐ Yes ⊠ No		
Are the lateral extents of the release within 500 horizontal feet of a spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes?	☐ Yes ⊠ No		
Are the lateral extents of the release within 1000 feet of any other fresh water well or spring?	☐ Yes ⊠ No		
Are the lateral extents of the release within incorporated municipal boundaries or within a defined municipal fresh water well field?	☐ Yes ⊠ No		
Are the lateral extents of the release within 300 feet of a wetland?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying a subsurface mine?	☐ Yes ⊠ No		
Are the lateral extents of the release overlying an unstable area such as karst geology?	⊠ Yes □ No		
Are the lateral extents of the release within a 100-year floodplain?	☐ Yes ⊠ No		
Did the release impact areas not on an exploration, development, production, or storage site?	⊠ Yes □ No		
Attach a comprehensive report (electronic submittals in .pdf format are preferred) demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined. Refer to 19.15.29.11 NMAC for specifics.			
Characterization Report Checklist: Each of the following items must be included in the report.			
Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells.			

Cha	aracterization Report Checklist: Each of the following items must be included in the report.
	Scaled site map showing impacted area, surface features, subsurface features, delineation points, and monitoring wells. Field data Data table of soil contaminant concentration data Depth to water determination Determination of water sources and significant watercourses within ½-mile of the lateral extents of the release Boring or excavation logs Photographs including date and GIS information Topographic/Aerial maps
	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.

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Facility ID		
Application ID		

regulations all operators are required to report and/or file certain public health or the environment. The acceptance of a C-141 refailed to adequately investigate and remediate contamination that	release notifications and perform corrective actions for releases which may endanger port by the OCD does not relieve the operator of liability should their operations have t pose a threat to groundwater, surface water, human health or the environment. In operator of responsibility for compliance with any other federal, state, or local laws
Printed Name: _Garrett Green	Title: _Environmental Coordinator
Signature: Sath Sur	Date:11/17/2022
email: _garrett.green@exxonmobil.com	Telephone:575-200-0729
OCD Only	
Received by: Jocelyn Harimon	Date:11/18/2022

te of New Mexico

Incident ID	NAPP2123634554
District RP	
Facility ID	
Application ID	

Closure

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

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

☐ A scaled site and sampling diagram as described in 19.15.29	.11 NMAC
Photographs of the remediated site prior to backfill or photomust be notified 2 days prior to liner inspection)	s of the liner integrity if applicable (Note: appropriate OCD District office
☐ Laboratory analyses of final sampling (Note: appropriate OE	OC 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 certa may endanger public health or the environment. The acceptance of should their operations have failed to adequately investigate and rehuman health or the environment. In addition, OCD acceptance of compliance with any other federal, state, or local laws and/or regulatore, reclaim, and re-vegetate the impacted surface area to the caccordance with 19.15.29.13 NMAC including notification to the	lations. The responsible party acknowledges they must substantially onditions that existed prior to the release or their final land use in OCD when reclamation and re-vegetation are complete.
Printed Name: _Garrett Green	Title: _Environmental Coordinator
Signature: Satt Sur	Date:11/17/2022
email:garrett.green@exxonmobil.com	Telephone:575-200-0729
OCD O. L.	
OCD Only	44/40/0000
Received by: Jocelyn Harimon	Date:11/18/2022
	y of liability should their operations have failed to adequately investigate and e water, human health, or the environment nor does not relieve the responsible l/or regulations.
Closure Approved by:	Date:
Printed Name:	Title:



November 17, 2022

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

Re: Closure Request

Avalon Delaware Unit 624 & 641

Incident Numbers NAPP2123634554 & NAPP2215449179

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 the site assessment, excavation, and soil sampling activities completed at the Avalon Delaware Unit 624 & 641 (Site). The purpose of the remediation activities was to address impacted soil resulting from two flow line releases of crude oil and produced water into the Site's surrounding pasture. Based on additional remedial activites completed as outlined in an approved *Remediation Work Plan (Work Plan)*, dated May 5, 2022, XTO is submitting this *Closure Request*, describing site assessment and excavation activities that have occurred and requesting closure for Incident Numbers NAPP2123634554 and NAPP2215449179.

SITE DESCRIPTION AND RELEASE SUMMARY

The Site is located in Unit D, Section 32, Township 20 South, Range 28 East, in Eddy County, New Mexico (32.53378° N, 104.20753° W) and is associated with oil and gas exploration and production operations on New Mexico State Land. Figure 1 depicts the site location on a topographic map.

On August 10, 2021, corrosion of a flow line resulted in the release of approximately 0.38 barrels (bbls) of crude oil and 8.21 bbls of produced water into the surrounding pasture. No fluids were recovered. XTO reported the release to the New Mexico Oil Conservation Division (NMOCD) on a Release Notification Form C-141 (Form C-141) on August 24, 2021. The release was assigned Incident Number NAPP2123634554.

Remediation efforts were delayed pending State Land access. A Right-of-Entry (ROE) Permit was submitted to the State land Office (SLO) in October 2021. The executed permit was received on January 18, 2022.

On February 2, 2022, delineation activities were conducted at the Site to assess the vertical extent of impacted soil. Potholes PH01 through PH03 were advanced via track mounted backhoe within the release extent at the locations of preliminary soil samples SS01 through SS03. The delineation potholes were advanced to depths ranging from 5 feet to 15 feet below ground surface (bgs). Soil from the potholes was field screened, at depths ranging from 1-foot to 15 feet bgs, for volatile organic compounds (VOCs) using a calibrated photoionizatoin detector (PID) and chloride utilizing Hach® chloride QuanTab® test strips. Field screening results indicated elevated chloride concentrations in potholes PH01 through PH03 at depths ranging from 1 foot to 15 feet bgs. Field screening results indicated elevated total petroleum hydrocarbon (TPH) concentrations in the top 4 feet of the release area. One additional pothole

Ensolum, LLC | Environmental, Engineering & Hydrogeologic Consultants 3122 National Parks Highway | Carlsbad, New Mexico 88220 | ensolum.com

(PH04) was advanced to a depth of 4 feet bgs outside of the release extent and confirmed the absence of naturally occurring chloride, at concentrations greater than 600 mg/kg, at the Site. The results from the delineation soil sampling suggested soil containing elevated TPH concentrations was present across the 750 square foot release area and extended from the ground surface to approximately 4 feet bgs; elevated chloride concentrations potentially extended at depths ranging from 1-foot to greater than 15 feet bgs. As a result, XTO submitted a *Work Plan* and proposed the following remediation activities:

- Lateral and vertical delineation of impacted soil to below the Site Closure Criteria.
- Lateral and vertical excavation of the TPH-impacted soil until concentrations in remaining soil are below 100 milligrams per kilogram (mg/kg).
- Lateral and vertical excavation of chloride-impacted soil in the top 4 feet (or greater if removal of TPH impacted soil exceeded 4 feet). Excavation to proceed laterally until sidewall samples confirm chloride concentrations compliant with the Closure Criteria in the top 4 feet.
- Following removal of impacted soil, 5-point composite confirmation samples would be collected
 at least every 200 square feet from the sidewalls and floor of the excavation. The 5-point
 composite samples will be collected by placing five equivalent aliquots of soil into a 1-gallon,
 resealable plastic bag and homogenizing the samples by thoroughly mixing. The excavation
 samples would be submitted for laboratory analysis of benzene, toluene, ethylbenzene, and total
 xylenes (BTEX), TPH, and chloride.
- Upon completion of excavation activities, a 20-mil impermeable liner would be installed over the chloride-impacted soil to mitigate further chloride impacts to the subsurface. The liner would be installed at 4 feet bgs within the open excavation.
- Impacted soil would be excavated and disposed of at a licensed disposal facility.
- The excavation would be backfilled and recontoured to match pre-existing conditions. The disturbed pasture would be re-seeded with an approved Bureau of Land Management (BLM) seed mixture.

On May 26, 2022, while a review of the *Work Plan* was pending, corrosion of a flow line resulted in a second release of approximately 0.46 bbls of crude oil and 11.05 bbls of produced water into the surrounding pasture. No fluids were recovered. XTO reported the release to the NMOCD on a Form C-141 on June 2, 2022. The release was assigned Incident Number NAPP2215449179. The release extent overlapped the August 2021 release, so XTO planned to address the two releases concurrently following approval of the *Work Plan* submitted on May 5, 2022.

The Work Plan was approved by NMOCD on July 20, 2022 via email with the following condition:

• The Remediation Plan is conditionally approved: The release will need to be remediated to the strictest closure criteria standards due to high karst potential. Please collect confirmation samples, representing no more than 200 ft2. The liner installation is only approved at 4 feet bgs if all floor samples show TPH less than 100 mg/kg. Floor samples must be excavated to the strictest closure criteria, backfilled to 4 feet bgs with clean material, and then the liner installed. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The work will need to occur in 90 days after the work plan has been approved.

What follows is a description of the work completed in compliance with the approved *Work Plan* to address both overlapping releases.



SITE CHARACTERIZATION AND CLOSURE CRITERIA

As documented in the Work Plan, the following NMOCD Table I Closure Criteria (Closure Criteria) apply:

Benzene: 10 mg/kgBTEX: 50 mg/kgTPH: 100 mg/kgChloride: 600 mg/kg

DELINEATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

Between May 4 and 5, 2022, Ensolum personnel were at the Site to complete site assessment and delineation activities for both the August 2021 and May 2022 releases based on information provided on the Form C-141s and visible surface staining observed in the release area. Potholes PH01 through PH06 were advanced via track-hoe within and around the overlapping release extents to assess the vertical extent of impacted soil. The potholes were advanced to a depth of 17 feet bgs. Delineation soil samples were collected from each pothole at depths ranging from 2 feet to 17 feet bgs. Soil from the potholes was field screened for VOCs and chloride. Field screening results and observations for the potholes were logged on lithologic soil sampling logs, which are included in Appendix A. Photographic documentation was completed during the Site visit 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 the following chemicals of concern (COCs): BTEX following United States Environmental Protection Agency (EPA) Method 8021B; TPH-gasoline range organics (GRO), TPH-diesel range organics (DRO), and TPH-oil range organics (ORO) following EPA Method 8015M/D; and chloride following EPA Method 300.0.

Laboratory analytical results for delineation soil samples collected from pothole PH01 and PH02, within the overlapping release extents, indicated chloride concentrations exceeding the Site Closure Criteria at depths ranging from 1-foot to 4 feet bgs. The terminal sample in potholes PH01 and PH02, collected at 17 feet bgs and 13 feet bgs, respectively were compliant with the Site Closure Criteria and vertically delineate the release. Laboratory analytical results for delineation soil samples collected from potholes PH03 through PH06, collected outside the release extents, indicated all COC concentrations were compliant with the Site Closure Criteria and successfully define the lateral extent of the release. The delineation soil sample locations are depicted on Figure 3. Laboratory analytical results for PH01 and PH02 exceeded the Site Closure Criteria in the top 4 feet of the pasture area that was impacted by the release, thus excavation activities were warranted.

EXCAVATION ACTIVITIES AND LABORATORY ANALYTICAL RESULTS

On September 14, 2022 Ensolum personnel were at the Site to complete excavation activities as detailed in the approved *Work Plan.* Excavation activities were performed using a track-mounted backhoe and transport vehicles. The excavation was initially completed to a maximum depth of 4.5 feet bgs and following removal of the impacted soil, 5-point composite soil samples were collected every 200 square feet from the floor and sidewalls of the excavation. Composite soil samples FS01 through FS11 were collected from the floor of the excavation at depths ranging from 4 feet to 4.5 feet bgs. Composite soil samples SW01 through SW10 were collected from the sidewalls of the excavation from depths ranging from the ground surface to 4.5 feet bgs. The soil samples were handled as proposed in the *Work Plan* and delivered to Eurofins in Carlsbad, New Mexico.

Laboratory analytical results for excavation soil samples FS06, FS07, FS10, and FS11 and sidewall samples SW01 through SW10 indicated all COC concentrations are compliant with the Site Closure Criteria. Laboratory analytical results for excavation soil samples FS01 through FS05, FS08 and FS09 indicated TPH concentrations exceeded the Site Closure Criteria and additional remediation activities were warranted. Additional soil was removed from the vicinity of the seven composite soil sample locations and subsequent excavation soil samples FS01A through FS05A, FS08A, and FS09A were collected at depths ranging from 7 feet to 8 feet bgs.

Laboratory analytical results for excavation floor sample FS04 indicated TPH concentrations exceeded the Site Closure Criteria. One pothole, PH07, was advanced in the vicinity of FS04 to assess the vertical extent of the impacts. Delineation soil samples were collected from the pothole at depths of 10 feet and 16 feet bgs. Soil samples were submitted for laboratory analysis of BTEX, TPH, and chloride. Laboratory analytical results for PH07, collected at 10 feet bgs, indicated TPH concentrations exceeded the Site Closure Criteria. Laboratory analytical results for PH07, collected at 16 feet bgs, indicated all COC concentrations were compliant with the Site Closure Criteria. Additional soil was excavated in the vicinity floor sample FS04/FS04A and pothole sample PH07 Subsequently, excavation soil samples FS12 through FS14 were collected, at depths ranging from 7.5 feet bgs to 12 feet bgs, which were all compliant with the TPH Closure Criteria. The final excavation extent and excavation soil sample locations are presented on Figure 3.

A total of approximately 195 cubic yards of impacted soil was removed during the excavation activities. Upon completion of excavation activities, a 20-mil impermeable liner was installed over the chloride-impacted soil to mitigate further chloride impacts to the subsurface. The liner was installed at the floor of the open excavation. The impacted soil was transported and properly disposed of at the R360 Facility in Hobbs, New Mexico

CLOSURE REQUEST

Site assessment and excavation activities were conducted at the Site to address two releases of produced water and crude oil. Laboratory analytical results for the excavation soil samples indicated benzene, BTEX, TPH concentrations were compliant with the Site Closure Criteria and actions approved in the *Work Plan*. In addition, chloride concentrations in the top 4 feet meet the Site Closure Criteria. Excavation floor samples do not contain any residual petroleum hydrocarbons and sidewall samples SW01 through SW10 are compliant with the Site Closure Criteria, defining the release extent. Based on the soil sample analytical results, no further remediation was required. XTO installed a 20-mil impermeable liner will over the chloride impacted soil to mitigate further chloride impacts to the subsurface and will backfill the excavation with material purchased locally and recontour the Site to match pre-existing site conditions. The disturbed pasture area will be re-seeded with an approved BLM seed mixture.



XTO believes these remedial actions are protective of human health, the environment, and groundwater and respectfully requests closure for Incident Number NAPP2123634554 and NAPP2215449179. XTO has completed the actions approved in the *Work Plan* and is submitting this closure request as a condition of approval.

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

Sincerely, **Ensolum, LLC**

Kalei Jennings

Kacci Jannings

Senior Project Manager

Ashley L. Ager, MS, PG

ashley L. ager

Principal

cc: Garrett Green, XTO

Shelby Pennington, XTO New Mexico State Land

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 Lithologic / Soil Sampling Logs

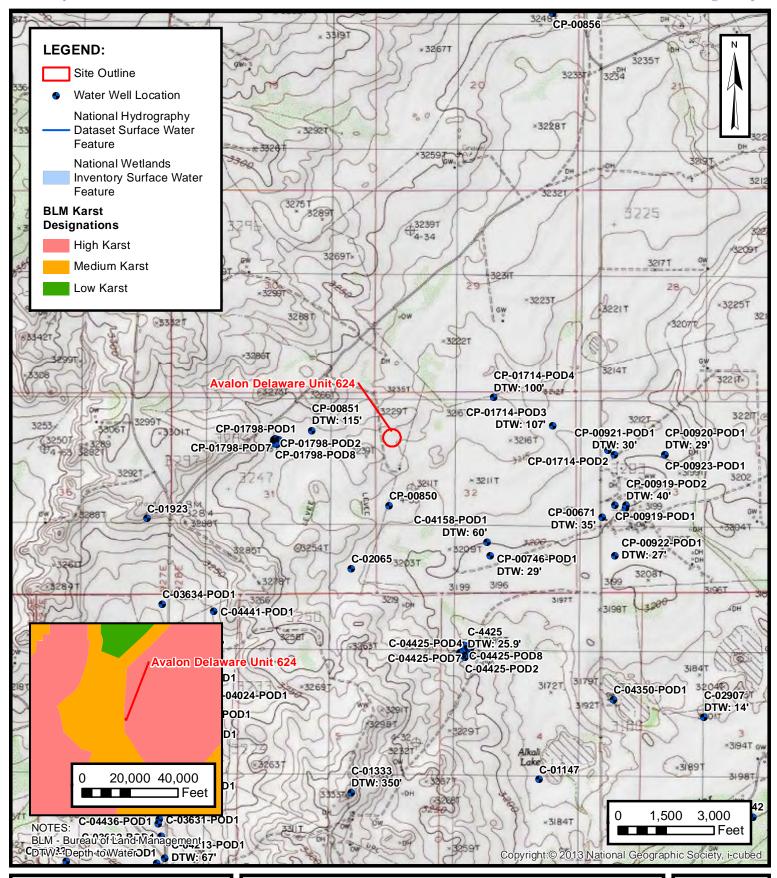
Appendix B Photographic Log

Appendix C Laboratory Analytical Reports and Chain of Custody Documentation

Appendix D NMOCD Notifications



FIGURES

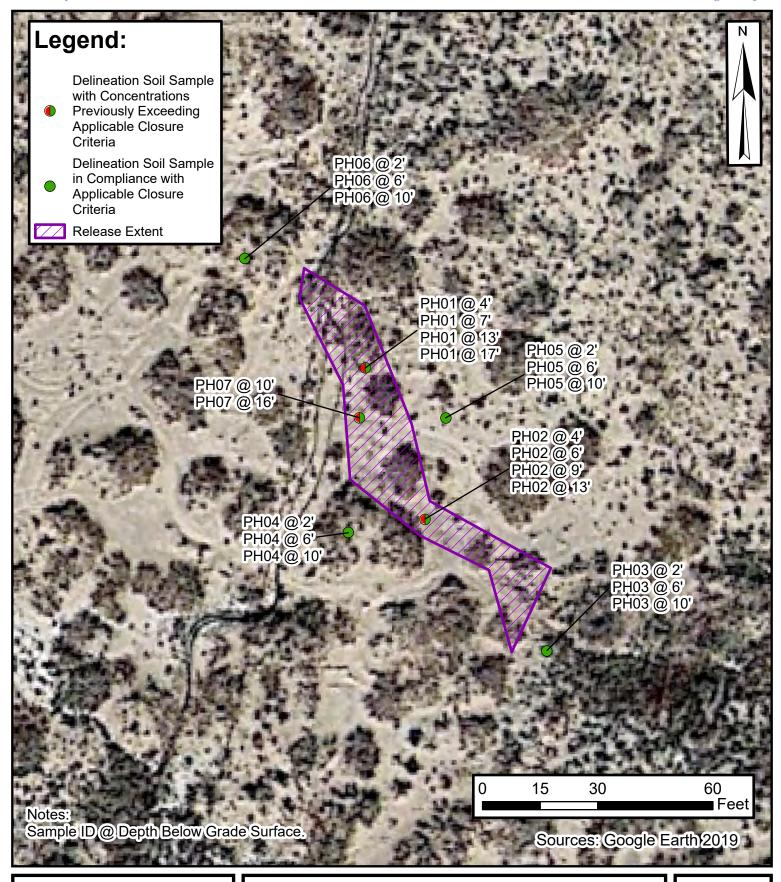




SITE RECEPTOR MAP

XTO ENERGY, INC AVALON DELAWARE UNIT 624 & 641 NAPP2123634554 & NAPP2215449179 Unit D, Sec 32, T20S, R28E Eddy County, New Mexico **FIGURE**

1





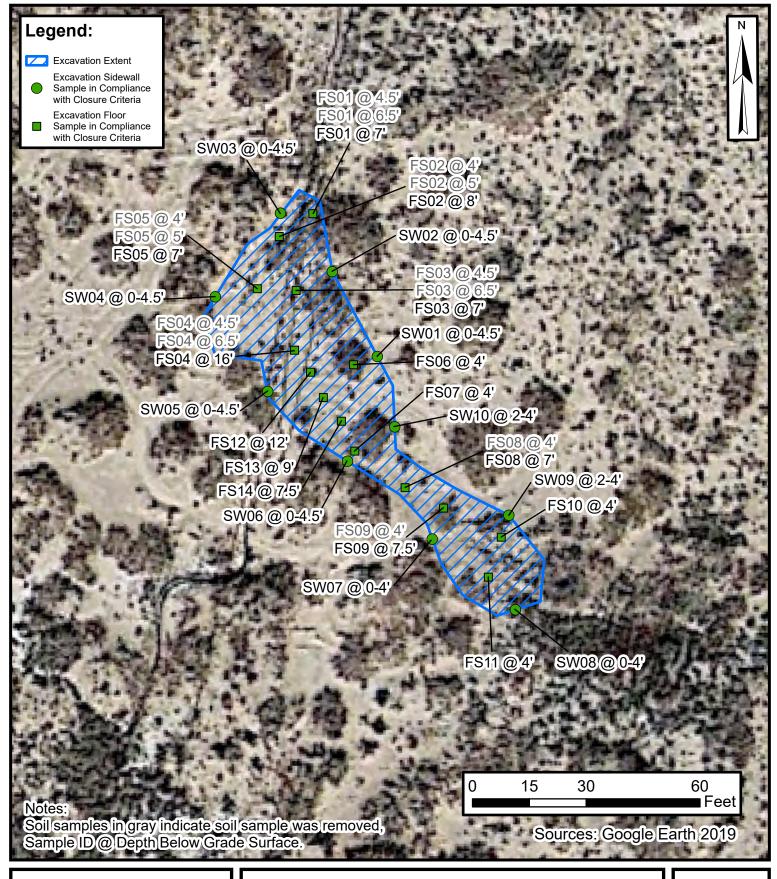
Delineation Soil Sample Locations

XTO ENERGY, INC. AVALON DELEWARE UNIT 624 & 641

> NAPP2123634554 & NAPP2215449179 Unit D, Sec 32, T20S, R28E Eddy County, New Mexico

FIGURE

2





Excavation Soil Sample Locations

XTO ENERGY, INC. AVALON DELEWARE UNIT 624 & 641

> NAPP2123634554 & NAPP2215449179 Unit D, Sec 32, T20S, R28E Eddy County, New Mexico

FIGURE

3



TABLES

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TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Avalon Delaware Unit 624 & 641 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 Cl	osure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
				Deli	ineation Soil San	nples				
PH01D	05/04/2022	4	< 0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	3,160
PH01G	05/04/2022	7	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	2,760
PH01M	05/04/2022	13	<0.00200	<0.00399	<49.8	<49.8	<49.8	<49.8	<49.8	2,510
PH01Q	05/04/2022	17	<0.00202	<0.00403	<50.0	<50.0	<50.0	<50.0	<50.0	360
PH02D	05/04/2022	4	< 0.00202	<0.00404	<50.0	<50.0	<50.0	<50.0	<50.0	2,770
PH02F	05/04/2022	6	<0.00200	<0.00401	<50.0	<50.0	<50.0	<50.0	<50.0	2,550
PH02I	05/04/2022	9	<0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	2,750
PH02M	05/04/2022	13	< 0.00201	<0.00402	<49.9	<49.9	<49.9	<49.9	<49.9	534
PH03A	05/05/2022	2	<0.000398	<0.000797	<50.0	<50.0	<50.0	<50.0	<50.0	28.8
PH03C	05/05/2022	6	< 0.000400	<0.000800	<50.0	<50.0	<50.0	<50.0	<50.0	107
PH03E	05/05/2022	10	< 0.000401	<0.000802	<50.0	<50.0	<50.0	<50.0	<50.0	181
PH04A	05/05/2022	2	<0.000402	<0.000805	<50.0	<50.0	<50.0	<50.0	<50.0	15.5
PH04C	05/05/2022	6	< 0.000403	<0.000806	<49.9	<49.9	<49.9	<49.9	<49.9	54.4
PH04E	05/05/2022	10	<0.000398	<0.000795	<50.0	<50.0	<50.0	<50.0	<50.0	154
PH05A	05/05/2022	2	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	241
PH05C	05/05/2022	6	< 0.00199	<0.00398	<49.8	<49.8	<49.8	<49.8	<49.8	154
PH05G	05/05/2022	10	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	266
PH06A	05/05/2022	2	<0.00201	<0.00402	<50.0	248	<50.0	24.8	24.8	9.83
PH06C	05/05/2022	6	<0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	133
PH06E	05/05/2022	10	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	154
PH07	10/04/2022	10'	1.90	93.7	2,300	3,240	361	5,540	5,900	2,410
PH07A	10/04/2022	16'	<0.00200	<0.00399	<49.9	<49.9	<49.9	<49.9	<49.9	74.1

Ensolum 1 of 3

Received by OCD: 11/17/2022 7:58:44 PM



TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Avalon Delaware Unit 624 & 641 XTO Energy, Inc. Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 C	Closure Criteria ((NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
				Exca	avation Floor Sai	mples				
FS01	09/14/2022	4.5	0.194	12.1	342	681	<50.0	1,023	1,023	156
FS01	09/19/2022	6.5'	< 0.0198	1.09	185	404	<50.0	589	589	3,590
FS01A	10/05/2022	7'	<0.00198	0.00914	<49.9	<49.9	<49.9	<49.9	<49.9	3,950
FS02	09/14/2022	4	< 0.0499	0.234	<49.9	1470	<49.9	1,470	1,470	93.4
FS02	09/19/2022	5'	0.0618	36.3	1,570	1,840	<50.0	3,410	3,410	4,300
FS02A	10/05/2022	8'	< 0.00200	<0.00401	<49.9	<49.9	<49.9	<49.9	<49.9	3,210
FS03	09/14/2022	4.5	0.121	18.0	1340	3990	<250	5,330	5,330	93.4
FS03	09/19/2022	6.5'	< 0.0198	0.397	87.7	254	<49.9	342	342	3,360
FS03A	10/05/2022	7'	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	3,810
FS04	09/14/2022	4.5	< 0.199	15.2	863	1410	<49.9	2,270	2,270	93.4
FS04	09/19/2022	6.5'	1.03	33.4	1,680	1,910	<49.9	3,590	3,590	1,880
FS04A	11/07/2022	16'	<0.00200	<0.00399	<49.8	52.8	<49.8	52.8	52.8	1,550
FS05	09/15/2022	4'	< 0.00199	<0.00398	<49.9	135	<49.9	135	135	515
FS05	09/19/2022	5'	< 0.200	11.7	719	1,220	<49.9	1,939	1,940	3,120
FS05A	10/05/2022	7'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,720
FS06	09/14/2022	4'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,770
FS07	09/15/2022	4'	<0.00202	<0.00404	<49.9	93.5	<49.9	93.5	93.5	2,020
FS08	09/15/2022	4'	< 0.00200	<0.00399	<49.9	564	<49.9	564	564	2,170
FS08A	10/04/2022	7'	<0.00201	<0.00402	<50.0	11.8	<50.0	11.8	11.8	2,940
FS09	09/15/2022	4'	< 0.00199	<0.00398	<50.0	267	<50.0	267	267	2,240
FS09A	10/04/2022	7.5'	<0.00202	<0.00403	<50.0	53.9	<50.0	53.9	53.9	3,330
FS10	09/15/2022	4'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	3,030
FS11	09/15/2022	4'	<0.00201	<0.00402	<49.9	50.2	<49.9	50.2	50.2	2,880
FS12	11/08/2022	12'	<0.00199	<0.00398	<49.9	63.1	<49.9	63.1	63.1	2,500
FS13	11/08/2022	9'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	1,200
FS14	11/08/2022	7.5'	<0.00199	<0.00398	<50.0	<50.0	<50.0	<50.0	<50.0	2,310

Ensolum 2 of 3

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TABLE 1 SOIL SAMPLE ANALYTICAL RESULTS Avalon Delaware Unit 624 & 641 XTO Energy, Inc. Eddy County, New Mexico

Sample I.D.	Sample Date	Sample Depth (feet bgs)	Benzene (mg/kg)	Total BTEX (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)	GRO+DRO (mg/kg)	Total TPH (mg/kg)	Chloride (mg/kg)
NMOCD Table 1 C	losure Criteria (NMAC 19.15.29)	10	50	NE	NE	NE	NE	100	600
				Excav	ation Sidewall S	amples				
SW01	09/12/2022	0-4.5'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	150
SW02	09/12/2022	0-4.5'	<0.00202	<0.00403	<49.9	<49.9	<49.9	<49.9	<49.9	73.9
SW03	09/12/2022	0 - 4.5	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	32.3
SW04	09/12/2022	0-4.5'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	498
SW05	09/12/2022	0-4.5'	<0.00200	<0.00400	<49.9	<49.9	<49.9	<49.9	<49.9	17.2
SW06	09/12/2022	0 - 4.5	<0.00198	<0.00396	<50.0	<50.0	<50.0	<50.0	<50.0	396
SW07	09/13/2022	0-4'	<0.00200	<0.00399	<50.0	49.0	<50.0	49.0	49.0	200
SW08	09/13/2022	0-4'	<0.00202	<0.00404	<50.0	35.1	<50.0	35.1	35.1	537
SW09	10/04/2022	2'-4'	<0.00200	<0.00399	<50.0	<50.0	<50.0	<50.0	<50.0	222
SW10	10/04/2022	2'-4'	<0.00199	<0.00398	<49.9	<49.9	<49.9	<49.9	<49.9	149

Notes:

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

NMOCD: New Mexico Oil Conservation Division

BTEX: Benzene, Toluene, Ethylbenzene, and Xylenes

Concentrations in bold exceed the NMOCD Table 1 Closure Criteria or

reclamation standard where applicable.

gray text indicates soil sample removed during excavation activities

GRO: Gasoline Range Organics

DRO: Diesel Range Organics

ORO: Oil Range Organics

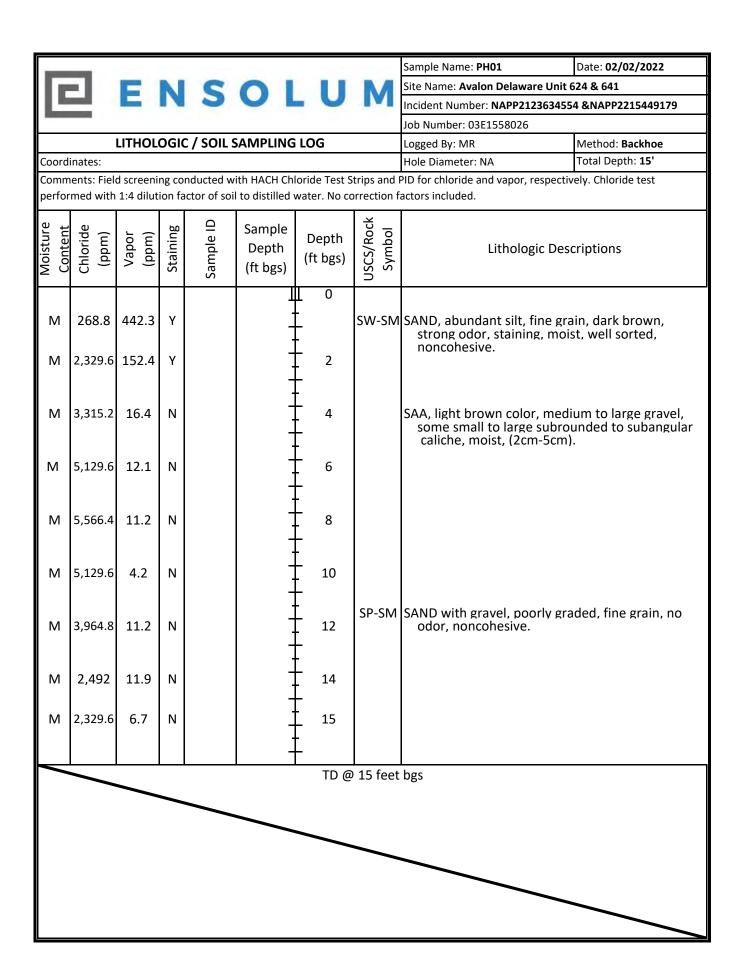
TPH: Total Petroleum Hydrocarbon

Ensolum 3 of 3

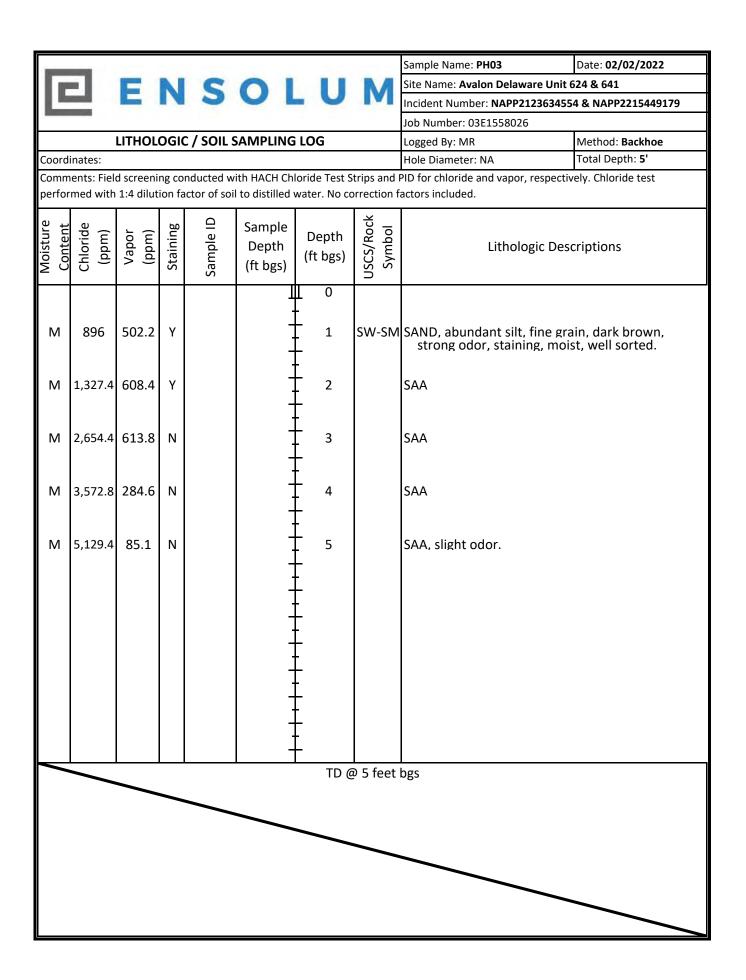


APPENDIX A

Lithologic Soil Sampling Logs



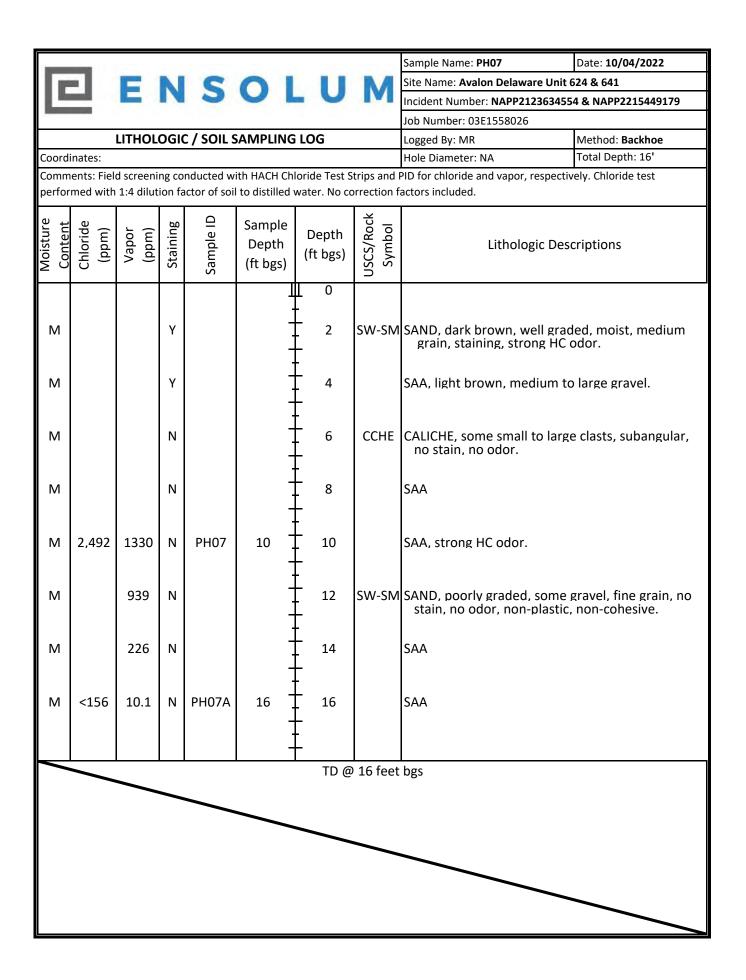
							Comple Names BUO	Data: 02/02/2022				
							Sample Name: PH02 Site Name: Avalon Delaware Unit	Date: 02/02/2022				
		N	5	OL	. U	M						
	LITUO	001	. /	A NADI INIA		Job Number: 03E1558026						
Condinator	LITHOL	OGIC	. / SUIL S	AMPLING		Logged By: MR	Method: Backhoe Total Depth: 5'					
Coordinates:	ld caraoni	n~ 00	ndustad w	:+b !!A C!! Cb!	trine and I	Hole Diameter: NA						
	Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic De:	scriptions				
				Ц	0							
M 1,764	124.4	Υ		-	1	SW-SM	SAND, abundant silt, fine gr strong odor, staining, mo	rain, dark brown, ist, well sorted.				
M 6,036.8	74.6	Υ		-	2		SAA					
M 3,304	40.2	N		-	3 		SAA					
M 3,572.8	62.1	N		- -	4 4		SAA, slight odor.					
M 2,850.4	44.8	N			5 - 5		SAA					
		_	_		10 @	9 5 feet	bgs					



								Comple Name: BUOA	Data: 02/04/2022			
								Sample Name: PH04 Site Name: Avalon Delaware Unit	Date: 02/04/2022			
		E	N	5	OL	U	M					
								Incident Number: NAPP2123634554 & NAPP2215449179 Job Number: 03E1558026				
		LITUOI	0010	. /	A NADI INIC							
C 1		LITHOL	UGIC	. / SUIL S	AMPLING	Logged By: MR	Method: Backhoe Total Depth: 6'					
	inates:	d caraoni	na 00	aduatad w	:+h !!^C!! Chl	Hole Diameter: NA PID for chloride and vapor, respecti	'					
			_					actors included.	very. Cilioride test			
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions			
					4	0						
М	<128	1.0	Υ		-	1	SW-SM	SAND, light brown, well grad grain, no stain, no odor.	ded, moist, medium			
М	<128	0.6	Υ		- - -	2 		SAA, non-plastic.				
М	498.4	0.6	N		-	3		SAA				
М	1,327.2	0.7	N		CCHE CALICHE, small to large clasts, subangular angular, no stain, no odor.							
М			N		-	- _ _ 5 _		SAA				
М			N		-	- - - - - - - - - -		SAA				
	TD @ 6 feet bgs											

								Sample Name: PH05	Date: 05/05/2022			
	-				0 1			Site Name: Avalon Delaware Unit				
			N	5	OL		V	Incident Number: NAPP2123634554 & NAPP2215449179				
-	- 63					Job Number: 03E1558026						
		LITUOL	ne i	· / ເດາ ເ	SAMPLING	106						
Coordi		LITHOL	OGIC	. / 3OIL 3	AIVIPLING	Logged By: MR Hole Diameter: NA	Method: Backhoe Total Depth: 12'					
		d ccrooni	na co	nducted w	i+h UACU Ch		'					
	Comments: Field screening conducted with HACH Chloride Test Strips and PID for chloride and vapor, respectively. Chloride test performed with 1:4 dilution factor of soil to distilled water. No correction factors included.											
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions			
					1	<u> </u>						
М	268	3.4	Υ	PH05A	2 _	2	SW-SM	SAND, dark brown, well gra grain, staining, strong HC	ded, moist, medium odor.			
М	<168	2.1	Υ		- -	4 		SAA, light brown, medium t	o large gravel.			
М	<168	0.9	Ν	PH05C	6 _	- - 6	ССНЕ	CALICHE, some small to large clasts, subangular, no stain, no odor.				
М	<168	0.7	Ν		-	- - - 8		SAA				
М	<168	0.2	Ν	PH05G	10	10		SAA				
M	<168	0.2	Z			12 - - - - - - -	SW-SM	SAND, poorly graded, some stain, no odor, non-plastic				
						TD @	12 feet	bgs				
			_									
						<u> </u>						
1												

								Sample Name: PH06	Date: 05/05/2022		
								Site Name: Avalon Delaware Unit			
		E	N	5	OL	. U	M	Incident Number: NAPP2123634554 & NAPP2215449179			
_	- 23		_					Job Number: 03E1558026			
		LITHOL	201	. / ເດນ ເ	SAMPLING	106					
Coordi	nates:	LITHOL	Juli	2 / 3UIL 3	AIVIPLING	Logged By: MR Hole Diameter: NA	Total Depth: 15'				
		d ccrooni	20.00	nducted w	i+h UACU Ch	PID for chloride and vapor, respect	·				
II			_					actors included.	ivery. Cilionae test		
Moisture Content	Chloride (ppm)	Vapor (ppm)	Staining	Sample ID	Sample Depth (ft bgs)	Depth (ft bgs)	USCS/Rock Symbol	Lithologic Des	scriptions		
					1	1 0					
M	268	442.3	Υ	PH06A	2 -	2	SW-SM	SAND, dark brown, well gra grain, staining, strong HC	ded, moist, medium odor.		
М	3,315	16.4	Υ		- - -	4 		SAA, light brown, medium t	o large gravel.		
М	5,129	12.1	N	PH06C	6 _	- - - -	ССНЕ	CALICHE, some small to large clasts, subangular, no stain, no odor.			
М	5,566	11.2	N		- - -	- - - -		SAA			
М	5,129	4.2	N	PH06E	10 _	10		SAA			
М	3,964	11.2	N			12		SAND, poorly graded, some stain, no odor, non-plastic			
М	2,492	11.9	N		_	14		SAA			
М	2,329	6.7	N		- - -	15 		SAA			
					- - -	- - -					
	<u> </u>					TD @	15 feet	bgs			





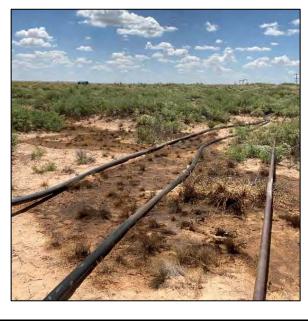
APPENDIX B

Photographic Log



Photographic Log

XTO Energy, Inc.
Avalon Delaware Unit 624 & 641
Incident Numbers NAPP2123634554 & NAPP2215449179



Photograph: 1 Date: 8/26/2021

Description: Soil staining in release footprint

View: South



Photograph: 2 Date: 6/17/2022

Description: Soil staining from second release

View: North



Photograph: 3 Date: 11/8/2022

Description: Excavation activities

View: Southeast



Photograph: 4 Date: 11/8/2022

Description: Excavation activities

View: Northwest



APPENDIX C

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: 890-2935-1

Laboratory Sample Delivery Group: 03E1558026/03E1558062

Client Project/Site: ADU 624/641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 9/14/2022 4:38:06 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: ADU 624/641 Laboratory Job ID: 890-2935-1 SDG: 03E1558026/03E1558062

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QC Association Summary	12
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Certification Summary	15
Method Summary	16
Sample Summary	17
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Definitions/Glossary

Job ID: 890-2935-1 Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Qualifiers

GC VOA

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

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
S1-	Surrogate recovery exceeds control limits, low biased.
U	Indicates the analyte was analyzed for but not detected.
HPI C/IC	

Qualifier

U

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)

Qualifier Description

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

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

Presumptive PRES 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) Toxicity Equivalent Quotient (Dioxin) TEQ

TNTC Too Numerous To Count

Eurofins Carlsbad

Case Narrative

Client: Ensolum

Job ID: 890-2935-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Job ID: 890-2935-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2935-1

Receipt

The samples were received on 9/12/2022 3:00 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 3.2°C

GC VOA

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

GC Semi VOA

Method 8015MOD NM: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) samples: (890-2933-A-1-B MS) and (890-2933-A-1-C MSD). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-34416 and analytical batch 880-34433 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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

HPLC/IC

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

Client Sample Results

Client: Ensolum Job ID: 890-2935-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW03 Date Collected: 09/12/22 13:25

Date Received: 09/12/22 15:00 Sample Depth: 0 - 4.5

Lab Sample ID: 890-2935-1

Matrix: Solid

- 5	
2	

Method: 8021B - Volatile Organic	: Compounds ((GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U	0.00199	mg/Kg		09/14/22 09:19	09/14/22 16:56	
Toluene	<0.00199	U	0.00199	mg/Kg		09/14/22 09:19	09/14/22 16:56	
Ethylbenzene	< 0.00199	U	0.00199	mg/Kg		09/14/22 09:19	09/14/22 16:56	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		09/14/22 09:19	09/14/22 16:56	
o-Xylene	< 0.00199	U	0.00199	mg/Kg		09/14/22 09:19	09/14/22 16:56	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		09/14/22 09:19	09/14/22 16:56	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	115		70 - 130			09/14/22 09:19	09/14/22 16:56	
1,4-Difluorobenzene (Surr)	75		70 - 130			09/14/22 09:19	09/14/22 16:56	
- Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/14/22 17:30	-
Mothod: 9045 NM Discal Bongs	Organica (DD	0) (CC)						
Method: 8015 NM - Diesel Range Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	<49.9	U	49.9	mg/Kg			09/14/22 17:04	
- Method: 8015B NM - Diesel Rang	ie Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/14/22 11:30	09/14/22 12:42	
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/14/22 11:30	09/14/22 12:42	
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/14/22 11:30	09/14/22 12:42	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	77		70 - 130			09/14/22 11:30	09/14/22 12:42	
o-Terphenyl	78		70 - 130			09/14/22 11:30	09/14/22 12:42	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa

Client Sample ID: SW06

Date Collected: 09/12/22 13:40 Date Received: 09/12/22 15:00

Sample Depth: 0 - 4.5

Lab	Sample	ID:	890-2935-	2

Matrix: Solid

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
Toluene	<0.00198	U	0.00198	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
m-Xylene & p-Xylene	<0.00396	U	0.00396	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
Xylenes, Total	<0.00396	U	0.00396	mg/Kg		09/14/22 09:19	09/14/22 17:17	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/14/22 09:19	09/14/22 17:17	1

Lab Sample ID: 890-2935-2

Client Sample Results

Client: Ensolum Job ID: 890-2935-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW06 Date Collected: 09/12/22 13:40

Sample Depth: 0 - 4.5

Analyte

Chloride

ate Received: 09/12/22 15:00		
ample Donth: 0 - 4 5		

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1,4-Difluorobenzene (Surr)	91		70 - 130			09/14/22 09:19	09/14/22 17:17	
· Method: Total BTEX - Total BTE)	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00396	U	0.00396	mg/Kg			09/14/22 17:30	
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH : 	<50.0		50.0	mg/Kg			09/14/22 17:04	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)				Duam d		D2 -
	ge Organics (D	RO) (GC) Qualifier	50.0 RL 50.0	mg/Kg Unitmg/Kg	<u>D</u>	Prepared 09/14/22 11:30	09/14/22 17:04 Analyzed 09/14/22 13:03	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (Di Result <50.0	RO) (GC) Qualifier	RL 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	09/14/22 11:30	Analyzed 09/14/22 13:03	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier	RL	Unit	<u>D</u>		Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <50.0	RO) (GC) Qualifier U	RL 50.0	Unit mg/Kg mg/Kg	<u>D</u>	09/14/22 11:30 09/14/22 11:30	Analyzed 09/14/22 13:03	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (Di Result <50.0	RO) (GC) Qualifier U	RL 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	09/14/22 11:30	Analyzed 09/14/22 13:03	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (DI Result <50.0	RO) (GC) Qualifier U	RL 50.0	Unit mg/Kg mg/Kg	<u>D</u>	09/14/22 11:30 09/14/22 11:30	Analyzed 09/14/22 13:03	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 (D) Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	Unit mg/Kg mg/Kg	<u>D</u>	09/14/22 11:30 09/14/22 11:30 09/14/22 11:30	Analyzed 09/14/22 13:03 09/14/22 13:03	

5.03

Unit

mg/Kg

Prepared

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Dil Fac

Analyzed

09/14/22 13:15

Method: 300.0 - Anions, Ion Chromatography - Soluble

Result Qualifier

Surrogate Summary

Client: Ensolum Job ID: 890-2935-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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)	
880-18879-A-81-G MS	Matrix Spike	135 S1+	101	
880-18879-A-81-H MSD	Matrix Spike Duplicate	126	106	
890-2935-1	SW03	115	75	
890-2935-2	SW06	111	91	
LCS 880-34264/1-A	Lab Control Sample	140 S1+	99	
LCSD 880-34264/2-A	Lab Control Sample Dup	143 S1+	103	
MB 880-34264/5-A	Method Blank	99	84	

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

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

Matrix: Solid Prep Type: Total/NA

_			
		1001	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2933-A-1-B MS	Matrix Spike	73	66 S1-
890-2933-A-1-C MSD	Matrix Spike Duplicate	78	68 S1-
890-2935-1	SW03	77	78
890-2935-2	SW06	77	76
LCS 880-34416/2-A	Lab Control Sample	96	98
LCSD 880-34416/3-A	Lab Control Sample Dup	81	82
MB 880-34416/1-A	Method Blank	109	111

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-2935-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34264/5-A

Matrix: Solid Analysis Batch: 34441 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34264

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:19	09/14/22 11:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:19	09/14/22 11:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:19	09/14/22 11:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/12/22 10:19	09/14/22 11:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/12/22 10:19	09/14/22 11:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/12/22 10:19	09/14/22 11:54	1

MB MB

Surrogate	%Recovery	Qualifier	Limits		Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09	9/12/22 10:19	09/14/22 11:54	1
1,4-Difluorobenzene (Surr)	84		70 - 130	09	9/12/22 10:19	09/14/22 11:54	1

Client Sample ID: Lab Control Sample Lab Sample ID: LCS 880-34264/1-A

Matrix: Solid

Analysis Batch: 34441

Prep Type: Total/NA

Prep Batch: 34264

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08269		mg/Kg		83	70 - 130	
Toluene	0.100	0.08547		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.1039		mg/Kg		104	70 - 130	
m-Xylene & p-Xylene	0.200	0.2233		mg/Kg		112	70 - 130	
o-Xylene	0.100	0.1281		mg/Kg		128	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-34264/2-A

Matrix: Solid

Analysis Batch: 34441

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34264

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.07992		mg/Kg		80	70 - 130	3	35	
Toluene	0.100	0.07910		mg/Kg		79	70 - 130	8	35	
Ethylbenzene	0.100	0.09582		mg/Kg		96	70 - 130	8	35	
m-Xylene & p-Xylene	0.200	0.2050		mg/Kg		103	70 - 130	9	35	
o-Xylene	0.100	0.1181		mg/Kg		118	70 - 130	8	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	143	S1+	70 - 130
1.4-Difluorobenzene (Surr)	103		70 - 130

Lab Sample ID: 880-18879-A-81-G MS

Matrix: Solid

Analysis Batch: 34441

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

Prep Batch: 34264

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U	0.101	0.08089		mg/Kg		80	70 - 130	
Toluene	<0.00202	U	0.101	0.08273		mg/Kg		82	70 - 130	

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Prep Batch: 34264

Prep Type: Total/NA

Client Sample ID: Matrix Spike Duplicate

QC Sample Results

Client: Ensolum Job ID: 890-2935-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

Lab Sample ID: 880-18879-A-81-G MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 34441

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00202	U	0.101	0.09554		mg/Kg		95	70 - 130	
m-Xylene & p-Xylene	<0.00404	U	0.202	0.2069		mg/Kg		102	70 - 130	
o-Xylene	<0.00202	U	0.101	0.1190		mg/Kg		118	70 - 130	
	440	440								
	MS	MS								

%Recovery Qualifier Limits Surrogate 70 - 130 4-Bromofluorobenzene (Surr) 135 S1+ 1,4-Difluorobenzene (Surr) 70 - 130 101

Lab Sample ID: 880-18879-A-81-H MSD

Matrix: Solid

Analysis Batch: 34441										Batch:	34264
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U	0.0994	0.08322		mg/Kg		84	70 - 130	3	35
Toluene	<0.00202	U	0.0994	0.08076		mg/Kg		81	70 - 130	2	35
Ethylbenzene	<0.00202	U	0.0994	0.09008		mg/Kg		91	70 - 130	6	35
m-Xylene & p-Xylene	<0.00404	U	0.199	0.1884		mg/Kg		95	70 - 130	9	35
o-Xylene	<0.00202	U	0.0994	0.1082		mg/Kg		109	70 - 130	10	35

MSD MSD Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 126 1,4-Difluorobenzene (Surr) 106 70 - 130

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

Matrix: Solid

Analysis Batch: 34433

Lab Sample ID: MB 880-34416/1-A

•	МВ	MB					•	
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/13/22 15:30	09/14/22 09:53	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		09/13/22 15:30	09/14/22 09:53	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/13/22 15:30	09/14/22 09:53	1

MB MB %Recovery Qualifier Limits Prepared Analyzed Surrogate 1-Chlorooctane 109 70 - 130 09/13/22 15:30 09/14/22 09:53 111 70 - 130 09/13/22 15:30 09/14/22 09:53 o-Terphenyl

Lab Sample ID: LCS 880-34416/2-A

Matrix: Solid

Analysis Batch: 34433						Prep Batch: 34416				
	Spike	LCS	LCS				%Rec			
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits			
Gasoline Range Organics	1000	1035		mg/Kg		103	70 - 130		-	
(GRO)-C6-C10										
Diesel Range Organics (Over	1000	1127		mg/Kg		113	70 - 130			

C10-C28)

Prep Type: Total/NA

Client Sample ID: Lab Control Sample

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

Prep Batch: 34416

Dil Fac

C10-C28)

Job ID: 890-2935-1

Client: Ensolum SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

Lab Sample ID: LCS 880-34416/2-A Client Sample ID: Lab Control Sample

Matrix: Solid Prep Type: Total/NA Analysis Batch: 34433 Prep Batch: 34416

LCS LCS Surrogate %Recovery Qualifier Limits 1-Chlorooctane 96 70 - 130 o-Terphenyl 98 70 - 130

Lab Sample ID: LCSD 880-34416/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 34433** Prep Batch: 34416

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits RPD Limit 1000 879.7 88 70 - 13016 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 920.3 92 mg/Kg 70 - 13020 20

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

Lab Sample ID: 890-2933-A-1-B MS Client Sample ID: Matrix Spike

Matrix: Solid Prep Type: Total/NA

Analysis Batch: 34433 Prep Batch: 34416 Sample Sample Spike MS MS

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 996 781.2 mg/Kg 78 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 UF1 996 640.2 F1 mg/Kg 63 70 - 130 C10-C28)

MS MS Surrogate %Recovery Qualifier Limits

7.3

1-Chlorooctane 66 S1o-Terphenyl 70 - 130

70 - 130

Lab Sample ID: 890-2933-A-1-C MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 34433 Prep Batch: 34416 Camania Camania Calle

	Sample	Sample	Spike	M2D	เพอบ				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	999	829.0		mg/Kg		83	70 - 130	6	20	
Diesel Range Organics (Over C10-C28)	<49.9	U F1	999	662.5	F1	mg/Kg		65	70 - 130	3	20	

MSD MSD Qualifier %Recovery Surrogate Limits 1-Chlorooctane 78 70 - 130 68 S1-70 - 130 o-Terphenyl

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Client Sample ID: Matrix Spike

QC Sample Results

 Client: Ensolum
 Job ID: 890-2935-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34376/1-A

Matrix: Solid

Analysis Batch: 34467

МВ МВ	
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 Analyte
 Result
 Qualifier
 RL
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 Prepared
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 Dil Fac

 Chloride
 <5.00</td>
 U
 5.00
 mg/Kg
 09/14/22 00:37
 1

Lab Sample ID: LCS 880-34376/2-A

Matrix: Solid

Analysis Batch: 34467

	Spike	LCS	LCS			%Rec
Analyte	Added	Result	Qualifier Unit	D	%Rec	Limits
Chloride	250	242.6	mg/K	g	97	90 - 110

Lab Sample ID: LCSD 880-34376/3-A

Matrix: Solid

Analysis Batch: 34467

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	250	243.0		mg/Kg		97	90 - 110	0	20

Lab Sample ID: 880-18884-A-8-D MS

Matrix: Solid

Analysis Batch: 34467

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	74.5		250	334.2		mg/Kg	_	104	90 - 110	

Lab Sample ID: 880-18884-A-8-E MSD

Matrix: Solid

Analysis Batch: 34467

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Chloride	74.5		250	336.7		mg/Kg		105	90 - 110	1	20

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2935-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC VOA

Prep Batch: 34264

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	5035	
890-2935-2	SW06	Total/NA	Solid	5035	
MB 880-34264/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34264/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34264/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-18879-A-81-G MS	Matrix Spike	Total/NA	Solid	5035	
880-18879-A-81-H MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34441

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	8021B	34264
890-2935-2	SW06	Total/NA	Solid	8021B	34264
MB 880-34264/5-A	Method Blank	Total/NA	Solid	8021B	34264
LCS 880-34264/1-A	Lab Control Sample	Total/NA	Solid	8021B	34264
LCSD 880-34264/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34264
880-18879-A-81-G MS	Matrix Spike	Total/NA	Solid	8021B	34264
880-18879-A-81-H MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34264

Analysis Batch: 34533

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	Total BTEX	
890-2935-2	SW06	Total/NA	Solid	Total BTEX	

GC Semi VOA

Prep Batch: 34416

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	8015NM Prep	
890-2935-2	SW06	Total/NA	Solid	8015NM Prep	
MB 880-34416/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34416/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34416/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2933-A-1-B MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2933-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34433

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	8015B NM	34416
890-2935-2	SW06	Total/NA	Solid	8015B NM	34416
MB 880-34416/1-A	Method Blank	Total/NA	Solid	8015B NM	34416
LCS 880-34416/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34416
LCSD 880-34416/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34416
890-2933-A-1-B MS	Matrix Spike	Total/NA	Solid	8015B NM	34416
890-2933-A-1-C MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34416

Analysis Batch: 34531

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Total/NA	Solid	8015 NM	
890-2935-2	SW06	Total/NA	Solid	8015 NM	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-2935-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

HPLC/IC

Leach Batch: 34376

Lab Sample ID 890-2935-1	Client Sample ID SW03	Prep Type Soluble	Matrix Solid	Method DI Leach	Prep Batch
890-2935-2	SW06	Soluble	Solid	DI Leach	
MB 880-34376/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 34467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2935-1	SW03	Soluble	Solid	300.0	34376
890-2935-2	SW06	Soluble	Solid	300.0	34376
MB 880-34376/1-A	Method Blank	Soluble	Solid	300.0	34376
LCS 880-34376/2-A	Lab Control Sample	Soluble	Solid	300.0	34376
LCSD 880-34376/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34376
880-18884-A-8-D MS	Matrix Spike	Soluble	Solid	300.0	34376
880-18884-A-8-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34376

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Date Received: 09/12/22 15:00

Lab Chronicle

Client: Ensolum Job ID: 890-2935-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Client Sample ID: SW03 Lab Sample ID: 890-2935-1 Date Collected: 09/12/22 13:25

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 34264 Total/NA Prep 5.02 g 5 mL 09/14/22 09:19 EL **EET MID** 8021B Total/NA Analysis 1 5 mL 5 mL 34441 09/14/22 16:56 MR **EET MID** Total/NA Analysis Total BTEX 34533 09/14/22 17:30 AJ EET MID Total/NA 8015 NM 34531 09/14/22 17:04 **EET MID** Analysis 1 SM Total/NA 8015NM Prep 34416 09/14/22 11:30 EET MID Prep 10.02 g 10 mL DM Total/NA Analysis 8015B NM 1 uL 1 uL 34433 09/14/22 12:42 SM **EET MID** Soluble DI Leach 4.98 g 50 mL 34376 09/14/22 11:54 SMC Leach **EET MID** Soluble Analysis 300.0 34467 09/14/22 13:10 СН **EET MID**

Client Sample ID: SW06 Lab Sample ID: 890-2935-2

Date Collected: 09/12/22 13:40 **Matrix: Solid**

Date Received: 09/12/22 15:00

	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	34264	09/14/22 09:19	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	34441	09/14/22 17:17	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34533	09/14/22 17:30	AJ	EET MID
Total/NA	Analysis	8015 NM		1			34531	09/14/22 17:04	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34416	09/14/22 11:30	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34433	09/14/22 13:03	SM	EET MID
Soluble	Leach	DI Leach			4.97 g	50 mL	34376	09/14/22 11:54	SMC	EET MIC
Soluble	Analysis	300.0		1			34467	09/14/22 13:15	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2935-1 Project/Site: ADU 624/641

SDG: 03E1558026/03E1558062

Laboratory: Eurofins Midland

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

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

Method Summary

Client: Ensolum Project/Site: ADU 624/641

Job ID: 890-2935-1

SDG: 03E1558026/03E1558062

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: ADU 624/641

Job ID: 890-2935-1

SDG: 03E1558026/03E1558062

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2935-1	SW03	Solid	09/12/22 13:25	09/12/22 15:00	0 - 4.5
890-2935-2	SW06	Solid	09/12/22 13:40	09/12/22 15:00	0 - 4.5

3

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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 Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K Se

Hg: 1631 / 245.1 / 7470 / 7471 Ag SiO₂ Na Sr Tl Sn U V Zn eurofins :

13 14

Chain of Custody

Environment Testing Xenco	Midland, TY EL Paso, T Hobbs, N	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:	om Page
ale Jennings	Bill to: (if different)	Garrett Green	Work Order Comments	윤
Enseiwen, LLZ	Company Name:	XTO Energies	Program: UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Superfund [
27 Natil Brks Hwy	Address:	3104 E Greene St	State of Project:	
dr Isbad, NM 88720 City, State ZIP.	City, State ZIP:	Carlsback, NM 88220	Reporting: Level III Level III PST/UST TRRP Level IV	
817-683-2503 Emai	all KJCANI	Email: Kjennings@ensoiwn.com	Deliverables: EDD	ADaPT 🗆
Du 624/641 Tu	Turn Around	ANALYSIS REQUEST	JEST	-
E155802403E1558062 Routine	e Rush Code			
2. 53378, -104.20753 Due Date: 3 Day	2)			
Cocd it he best the lab, if n	TAT starts the day received by the lab, if received by 4:30pm			
Temp Blank: Yes No Wet Ice:	(Yes) No			
Thermometer ID:	HOW BH	ون		
	2		890-2935 Chain of Custody	

SAMPLE RECEIPT

0

Cooler Custody Seals:

Yes No

N/A

Temperature Reading: Corrected Temperature:

res No N/A

Correction Factor: Thermometer ID:

amples Received Intact:

otal Containers: ample Custody Seals:

Sample Identification

Matrix

Sampled

Date

Time Sampled

Depth

Grab/ Comp

of

BTEX

Chlorides

890-2935 Chain of Custody

Na₂S₂O₃: NaSO₃

NaOH+Ascorbic Acid: SAPC Zn Acetate+NaOH: Zn

Sample Comments

NAPP 2215449179

"ast Center(s) 1136151001 113614100

beadont #5 MAPP2123634554

1340

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SW06

Sampler's Name:

Mercaltable

oject Location:

roject Number:

03 F 15 5 602 W 03 E1 32. 53378, -109

ADW 624/64

oject Name:

ddress: ompany Name: roject Manager:

1916 JOH

ity, State ZIP:

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 otice: 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 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 nquished by: (Signature) Received by: (Signature) TCLP / SPLP 6010 : 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U じから Date/Time Relinquished by: (Signature) Received by: (Signature) ed Date 08/25/2020 Rev. 2020.2 Date/Time

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2935-1

SDG Number: 03E1558026/03E1558062

Login Number: 2935 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	

Eurofins Carlsbad Page 19 of 20 9/14/2022

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2935-1

SDG Number: 03E1558026/03E1558062

Login Number: 2935 **List Source: Eurofins Midland** List Number: 2 List Creation: 09/14/22 11:07 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: 890-2955-1

Laboratory Sample Delivery Group: 03E1558026/O3E1558062

Client Project/Site: ADU 624-641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 9/15/2022 4:38:38 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: ADU 624-641 Laboratory Job ID: 890-2955-1 SDG: 03E1558026/O3E1558062

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Definitions/Glossary

 Client: Ensolum
 Job ID: 890-2955-1

 Project/Site: ADU 624-641
 SDG: 03E1558026/O3E1558062

Qualifiers

GC VOA

Qualifier Qualifier Description

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

GC Semi VOA

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

HPLC/IC

U Indicates the analyte was analyzed for but not detected.

Glossary

DL, RA, RE, IN

LOD

MDC

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

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)

LOQ Limit of Quantitation (DoD/DOE)

MCL EPA recommended "Maximum Contaminant Level"

MDA Minimum Detectable Activity (Radiochemistry)

Limit of Detection (DoD/DOE)

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)

Minimum Detectable Concentration (Radiochemistry)

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: ADU 624-641

Job ID: 890-2955-1

SDG: 03E1558026/O3E1558062

Job ID: 890-2955-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2955-1

Receipt

The samples were received on 9/14/2022 11:40 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 9.4°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: (CCV 880-34550/2) and (LCS 880-34407/1-A). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: (890-2884-A-1-C MS). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS01 (890-2955-1), FS02 (890-2955-2) and FS03 (890-2955-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS04 (890-2955-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-34554 and analytical batch 880-34548 was outside the upper control limits.

Method 8015MOD_NM: Surrogate recovery for the following sample was outside control limits: FS03 (890-2955-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

HPLC/IC

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

Eurofins Carlsbad 9/15/2022

Lab Sample ID: 890-2955-1

Client Sample Results

Client: Ensolum Job ID: 890-2955-1

Project/Site: ADI J 624-641 SDG: 03E1558026/O3E1558062

Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

Client Sample ID: FS01

Date Collected: 09/14/22 09:35 Date Received: 09/14/22 11:40

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.194		0.100	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
Toluene	2.07		0.100	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
Ethylbenzene	2.76		0.100	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
m-Xylene & p-Xylene	4.25		0.200	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
o-Xylene	2.81		0.100	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
Xylenes, Total	7.06		0.200	mg/Kg		09/15/22 12:00	09/15/22 13:29	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	172	S1+	70 - 130			09/15/22 12:00	09/15/22 13:29	50
1,4-Difluorobenzene (Surr)	117		70 - 130			09/15/22 12:00	09/15/22 13:29	50
Method: Total BTEX - Total BTE	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	12.1		0.200	mg/Kg			09/15/22 14:47	1
Method: 8015 NM - Diesel Range	Organics (DD)	O) (GC)						
Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1020		50.0	mg/Kg			09/15/22 17:29	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	342		50.0	mg/Kg		09/15/22 08:44	09/15/22 13:27	1
Diesel Range Organics (Over C10-C28)	681		50.0	mg/Kg		09/15/22 08:44	09/15/22 13:27	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/15/22 08:44	09/15/22 13:27	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	114		70 - 130			09/15/22 08:44	09/15/22 13:27	1
o-Terphenyl	119		70 - 130			09/15/22 08:44	09/15/22 13:27	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS02

Date Collected: 09/14/22 08:35

Date Received: 09/14/22 11:40

Sample Depth: 4

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0499	U	0.0499	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
Toluene	<0.0499	U	0.0499	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
Ethylbenzene	< 0.0499	U	0.0499	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
m-Xylene & p-Xylene	0.123		0.0998	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
o-Xylene	0.111		0.0499	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
Xylenes, Total	0.234		0.0998	mg/Kg		09/15/22 12:00	09/15/22 13:49	25
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)		S1+	70 - 130			09/15/22 12:00	09/15/22 13:49	25

Eurofins Carlsbad

Lab Sample ID: 890-2955-2

Matrix: Solid

Lab Sample ID: 890-2955-2

Olicin Gampie IX

 Client: Ensolum
 Job ID: 890-2955-1

 Project/Site: ADU 624-641
 SDG: 03E1558026/O3E1558062

Client Sample ID: FS02

Date Collected: 09/14/22 08:35 Date Received: 09/14/22 11:40

Sample Depth: 4

Method: 8021B	- Volatile Ord	nanic Com	oounds (GC	(Continued)
motiloa. Coz ib	Tolutile Oil	garno com	pourius (SS	, (Goillinaca)

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	99		70 - 130	09/15/22 12:00	09/15/22 13:49	25

Method:	Total BTEX	- Total BTEX	Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.234	0.0998	mg/Kg			09/15/22 14:47	1

П	Method: 8015 NM - Diese	Donge Organice /	DBO) (CC)
П	i Methou, ou la MM - Diese	Range Organics (וטטו וטאט

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1470	49.9	mg/Kg			09/15/22 17:29	1

ALC: LOCATE NA	D: 1 D	•	(DDO) (
Method: 8015B NM	- Diesel Range	Organics	(DKO) (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/15/22 08:44	09/15/22 12:46	1
Diesel Range Organics (Over C10-C28)	1470		49.9	mg/Kg		09/15/22 08:44	09/15/22 12:46	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/15/22 08:44	09/15/22 12:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	115	70 - 130	09/15/22 08:44	09/15/22 12:46	1
o-Terphenyl	119	70 - 130	09/15/22 08:44	09/15/22 12:46	1

Method: 300.0 - Anions,	Ion Chromatography - Soluble	

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1760	24.9	mg/Kg			09/15/22 13:06	5

Client Sample ID: FS03

Date Collected: 09/14/22 09:40

Lab Sample ID: 890-2955-3

Matrix: Solid

Date Collected: 09/14/22 09:40 Date Received: 09/14/22 11:40

Sample Depth: 4.5

Method: 8021B -	Malatile O		
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.121		0.0996	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
Toluene	0.685		0.0996	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
Ethylbenzene	1.69		0.0996	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
m-Xylene & p-Xylene	8.94		0.199	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
o-Xylene	6.60		0.0996	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
Xylenes, Total	15.5		0.199	mg/Kg		09/15/22 12:00	09/15/22 14:10	50
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	210	S1+	70 - 130			09/15/22 12:00	09/15/22 14:10	50
1,4-Difluorobenzene (Surr)	117		70 - 130			09/15/22 12:00	09/15/22 14:10	50

Mothod:	Total	RTFY -	Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	18.0		0.199	mg/Kg			09/15/22 14:47	1

Analyte		Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH		5330		250	mg/Kg			09/15/22 17:29	1

Eurofins Carlsbad

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Lab Sample ID: 890-2955-3

Job ID: 890-2955-1

Client: Ensolum Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

Client Sample ID: FS03

Date Collected: 09/14/22 09:40 Date Received: 09/14/22 11:40

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1340		250	mg/Kg		09/15/22 08:44	09/15/22 13:06	5
Diesel Range Organics (Over C10-C28)	3990		250	mg/Kg		09/15/22 08:44	09/15/22 13:06	5
Oll Range Organics (Over C28-C36)	<250	U	250	mg/Kg		09/15/22 08:44	09/15/22 13:06	5
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	129		70 - 130			09/15/22 08:44	09/15/22 13:06	5
o-Terphenyl	133	S1+	70 - 130			09/15/22 08:44	09/15/22 13:06	5
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac

Client Sample ID: FS04 Lab Sample ID: 890-2955-4 Matrix: Solid

Date Collected: 09/14/22 09:45 Date Received: 09/14/22 11:40

Sample Depth: 4.5

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.199	U	0.199	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
Toluene	0.927		0.199	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
Ethylbenzene	1.69		0.199	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
m-Xylene & p-Xylene	8.50		0.398	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
o-Xylene	4.12		0.199	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
Xylenes, Total	12.6		0.398	mg/Kg		09/15/22 12:00	09/15/22 14:30	100
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	158	S1+	70 - 130			09/15/22 12:00	09/15/22 14:30	100
1,4-Difluorobenzene (Surr)	102		70 - 130			09/15/22 12:00	09/15/22 14:30	100
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	15.2	-	0.398	mg/Kg			09/15/22 14:47	1
Mothod: 9045 NM Dioos! Danse	O							
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Method: 8015 NW - Diesei Range Analyte	•	O) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	•		RL 49.9	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 09/15/22 17:29	Dil Fac
Analyte	Result 2270	Qualifier			<u>D</u>	Prepared		
Analyte Total TPH Method: 8015B NM - Diesel Rang	Result 2270 ge Organics (Di	Qualifier			<u>D</u>	Prepared Prepared		
Analyte Total TPH	Result 2270 ge Organics (Di	Qualifier RO) (GC)	49.9	mg/Kg		<u> </u>	09/15/22 17:29	1
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 2270 ge Organics (Di	Qualifier RO) (GC)	49.9	mg/Kg		Prepared	09/15/22 17:29 Analyzed	1 Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	Result 2270 ge Organics (Di Result 863	Qualifier RO) (GC) Qualifier	49.9 RL 49.9	mg/Kg Unit mg/Kg		Prepared 09/15/22 08:44	09/15/22 17:29 Analyzed 09/15/22 12:25	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 2270 ge Organics (Di Result 863	Qualifier RO) (GC) Qualifier	49.9 RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 08:44 09/15/22 08:44	09/15/22 17:29 Analyzed 09/15/22 12:25 09/15/22 12:25	Dil Fac
Analyte Total TPH Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 2270 ge Organics (Di Result 863 1410 <49.9	Qualifier RO) (GC) Qualifier	49.9 RL 49.9 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg		Prepared 09/15/22 08:44 09/15/22 08:44	09/15/22 17:29 Analyzed 09/15/22 12:25 09/15/22 12:25	1 Dil Fac

Client Sample Results

Client: Ensolum Job ID: 890-2955-1 Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

Client Sample ID: FS04 Lab Sample ID: 890-2955-4 Date Collected: 09/14/22 09:45 Date Received: 09/14/22 11:40

Sample Depth: 4.5

Method: 300.0 - Anions, Ion Chromatography - Soluble											
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac				
Chloride	2430	24.9	mg/Kg			09/15/22 13:16	5				

Surrogate Summary

Client: Ensolum Job ID: 890-2955-1 Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

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)	
890-2884-A-1-C MS	Matrix Spike	135 S1+	100	
890-2884-A-1-D MSD	Matrix Spike Duplicate	115	104	
890-2955-1	FS01	172 S1+	117	
890-2955-2	FS02	177 S1+	99	
890-2955-3	FS03	210 S1+	117	
890-2955-4	FS04	158 S1+	102	
LCS 880-34407/1-A	Lab Control Sample	137 S1+	99	
LCSD 880-34407/2-A	Lab Control Sample Dup	117	105	
MB 880-34407/5-A	Method Blank	97	90	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2943-A-29-E MS	Matrix Spike	102	98	
890-2943-A-29-F MSD	Matrix Spike Duplicate	102	97	
890-2955-1	FS01	114	119	
890-2955-2	FS02	115	119	
890-2955-3	FS03	129	133 S1+	
890-2955-4	FS04	121	118	
LCS 880-34554/2-A	Lab Control Sample	101	118	
LCSD 880-34554/3-A	Lab Control Sample Dup	100	117	
MB 880-34554/1-A	Method Blank	133 S1+	150 S1+	

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-2955-1 SDG: 03E1558026/O3E1558062 Project/Site: ADU 624-641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-34407/5-A

Matrix: Solid

Analysis Batch: 34550

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34407

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/13/22 13:45	09/15/22 11:04	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/13/22 13:45	09/15/22 11:04	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/13/22 13:45	09/15/22 11:04	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/13/22 13:45	09/15/22 11:04	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/13/22 13:45	09/15/22 11:04	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/13/22 13:45	09/15/22 11:04	1

мв мв

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	97		70 - 130	09/13/22 13:45	09/15/22 11:04	1
1,4-Difluorobenzene (Surr)	90		70 - 130	09/13/22 13:45	09/15/22 11:04	1

Lab Sample ID: LCS 880-34407/1-A

Matrix: Solid

Analysis Batch: 34550

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 34407

	Spike	LCS	LUS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.08219		mg/Kg		82	70 - 130	
Toluene	0.100	0.08712		mg/Kg		87	70 - 130	
Ethylbenzene	0.100	0.09973		mg/Kg		100	70 - 130	
m-Xylene & p-Xylene	0.200	0.2205		mg/Kg		110	70 - 130	
o-Xylene	0.100	0.1268		mg/Kg		127	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	137	S1+	70 - 130
1,4-Difluorobenzene (Surr)	99		70 - 130

Lab Sample ID: LCSD 880-34407/2-A

Matrix: Solid

Analysis Batch: 34550

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 34407

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09835		mg/Kg		98	70 - 130	18	35
Toluene	0.100	0.09118		mg/Kg		91	70 - 130	5	35
Ethylbenzene	0.100	0.09852		mg/Kg		99	70 - 130	1	35
m-Xylene & p-Xylene	0.200	0.2005		mg/Kg		100	70 - 130	9	35
o-Xylene	0.100	0.1158		mg/Kg		116	70 - 130	9	35

LCSD LCSD

Surrogate	%Recovery Quali	fier Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1 4-Difluorobenzene (Surr)	105	70 - 130

Lab Sample ID: 890-2884-A-1-C MS

Matrix: Solid

Analysis Batch: 34550

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

Prep Batch: 34407

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.0998	0.08237		mg/Kg		83	70 - 130	
Toluene	<0.00201	U	0.0998	0.08496		mg/Kg		85	70 - 130	

Prep Type: Total/NA

Prep Type: Total/NA

70 - 130

Client Sample ID: Matrix Spike Duplicate

119

Prep Batch: 34407

QC Sample Results

Job ID: 890-2955-1 Client: Ensolum Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

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

<0.00201 U

Client Sample ID: Matrix Spike Lab Sample ID: 890-2884-A-1-C MS

Matrix: Solid Analysis Batch: 34550

o-Xylene

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D <0.00201 U 0.0998 0.09708 97 70 - 130 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00402 0.200 0.2077 mg/Kg 104 70 - 130

0.1183

0.0998

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	135	S1+	70 - 130
1.4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-2884-A-1-D MSD

Matrix: Solid

Analysis Batch: 34550

Prep Batch: 34407 Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit Analyte babbA Result Qualifier Limits Unit D Benzene <0.00201 U 0.101 0.08520 mg/Kg 85 70 - 130 3 35 Toluene <0.00201 0.101 0.07851 mg/Kg 78 70 - 130 8 35 <0.00201 0.101 0.08300 83 70 - 130 35 Ethylbenzene U mg/Kg 16 m-Xylene & p-Xylene <0.00402 U 0.201 0.1705 mg/Kg 85 70 - 130 20 35 70 - 130 0 101 0.09629 96 21 o-Xylene <0.00201 U mg/Kg 35

MSD MSD

Qualifier Limits Surrogate %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 115 1,4-Difluorobenzene (Surr) 104 70 - 130

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

Lab Sample ID: MB 880-34554/1-A

Matrix: Solid

Analysis Batch: 34548

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 34554 мв мв

mg/Kg

mg/Kg

Result Qualifier RL Unit D Prepared Dil Fac Analyte Analyzed 09/15/22 08:44 <50.0 U 50.0 09/15/22 09:19 Gasoline Range Organics mg/Kg (GRO)-C6-C10 09/15/22 08:44 09/15/22 09:19 Diesel Range Organics (Over <50.0 U 50.0 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 09/15/22 08:44 09/15/22 09:19 mg/Kg

MB MB

Limits Dil Fac %Recovery Qualifier Prepared Surrogate Analyzed 1-Chlorooctane 133 S1+ 70 - 130 09/15/22 08:44 09/15/22 09:19 150 S1+ 70 - 130 09/15/22 08:44 09/15/22 09:19 o-Terphenyl

Lab Sample ID: LCS 880-34554/2-A

Matrix: Solid

Diesel Range Organics (Over

Prep Type: Total/NA Analysis Batch: 34548 Prep Batch: 34554 Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1000 83 830.3 70 - 130 Gasoline Range Organics mg/Kg (GRO)-C6-C10

901.2

1000

C10-C28)

Client Sample ID: Lab Control Sample

70 - 130

90

Job ID: 890-2955-1 Client: Ensolum Project/Site: ADU 624-641

SDG: 03E1558026/O3E1558062

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

LCS LCS

Lab Sample ID: LCS 880-34554/2-A Client Sample ID: Lab Control Sample

Matrix: Solid

Analysis Batch: 34548

Prep Type: Total/NA

Prep Batch: 34554

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 101 70 - 130 o-Terphenyl 118 70 - 130

Lab Sample ID: LCSD 880-34554/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 34548

Prep Type: Total/NA

Prep Batch: 34554

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 805.4 81 70 - 1303 20 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 1000 890.3 89 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
1-Chlorooctane	100	70 - 130
o-Terphenyl	117	70 - 130

Lab Sample ID: 890-2943-A-29-E MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 34548

Prep Type: Total/NA

Prep Batch: 34554

Sample Sample Spike MS MS Analyte Result Qualifier hahhA Result Qualifier Unit D %Rec Limits Gasoline Range Organics <49.9 U 996 1049 mg/Kg 105 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 176 996 1029 mg/Kg 86 70 - 130

C10-C28)

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

Lab Sample ID: 890-2943-A-29-F MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 34548

Matrix: Solid

Prep Type: Total/NA

Prep Batch: 34554

Sample Sample MSD MSD RPD Spike %Rec Qualifier Analyte Result Added Result Qualifier Unit %Rec Limits **RPD** Limit <49.9 U 999 1078 108 20 Gasoline Range Organics mg/Kg 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 176 999 1034 mg/Kg 86 70 - 130 20

C10-C28)

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	102		70 - 130
o-Terphenyl	97		70 - 130

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Client Sample ID: Lab Control Sample Dup

Prep Type: Soluble

Prep Type: Soluble

Prep Type: Soluble

Client Sample ID: FS01

Client Sample ID: FS01

Prep Type: Soluble

Prep Type: Soluble

QC Sample Results

 Client: Ensolum
 Job ID: 890-2955-1

 Project/Site: ADU 624-641
 SDG: 03E1558026/O3E1558062

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34582/1-A

Matrix: Solid

Analysis Batch: 34594

MB MB

 Analyte
 Result Chloride
 Qualifier Qualifier
 RL VINITY
 Unit Mark
 D Prepared Prepared
 Analyzed Analyzed Oil Fac Oil

Lab Sample ID: LCS 880-34582/2-A

Matrix: Solid

Analysis Batch: 34594

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 235.3 mg/Kg 94 90 - 110

Lab Sample ID: LCSD 880-34582/3-A

Matrix: Solid

Analysis Batch: 34594

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit Chloride 250 236.0 mg/Kg 90 - 110

Lab Sample ID: 890-2955-1 MS

Matrix: Solid

Analysis Batch: 34594

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Qualifier Unit %Rec Result Limits 1260 Chloride 3640 4899 100 90 - 110 mg/Kg

Lab Sample ID: 890-2955-1 MSD

Released to Imaging: 2/15/2023 1:40:53 PM

Matrix: Solid

Analysis Batch: 34594

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 1260 3640 4907 mg/Kg 101 90 - 110 0 20

Eurofins Carlsbad

55 of 240

3

4

6

7

9

11

QC Association Summary

 Client: Ensolum
 Job ID: 890-2955-1

 Project/Site: ADU 624-641
 SDG: 03E1558026/O3E1558062

GC VOA

Prep Batch: 34407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	5035	
890-2955-2	FS02	Total/NA	Solid	5035	
890-2955-3	FS03	Total/NA	Solid	5035	
890-2955-4	FS04	Total/NA	Solid	5035	
MB 880-34407/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-34407/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-34407/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2884-A-1-C MS	Matrix Spike	Total/NA	Solid	5035	
890-2884-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 34550

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	8021B	34407
890-2955-2	FS02	Total/NA	Solid	8021B	34407
890-2955-3	FS03	Total/NA	Solid	8021B	34407
890-2955-4	FS04	Total/NA	Solid	8021B	34407
MB 880-34407/5-A	Method Blank	Total/NA	Solid	8021B	34407
LCS 880-34407/1-A	Lab Control Sample	Total/NA	Solid	8021B	34407
LCSD 880-34407/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	34407
890-2884-A-1-C MS	Matrix Spike	Total/NA	Solid	8021B	34407
890-2884-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	34407

Analysis Batch: 34599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	Total BTEX	
890-2955-2	FS02	Total/NA	Solid	Total BTEX	
890-2955-3	FS03	Total/NA	Solid	Total BTEX	
890-2955-4	FS04	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 34548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	8015B NM	34554
890-2955-2	FS02	Total/NA	Solid	8015B NM	34554
890-2955-3	FS03	Total/NA	Solid	8015B NM	34554
890-2955-4	FS04	Total/NA	Solid	8015B NM	34554
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015B NM	34554
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34554
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34554
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015B NM	34554
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	34554

Prep Batch: 34554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	8015NM Prep	
890-2955-2	FS02	Total/NA	Solid	8015NM Prep	
890-2955-3	FS03	Total/NA	Solid	8015NM Prep	
890-2955-4	FS04	Total/NA	Solid	8015NM Prep	
MB 880-34554/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34554/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	

QC Association Summary

Client: Ensolum Job ID: 890-2955-1 Project/Site: ADU 624-641

SDG: 03E1558026/O3E1558062

GC Semi VOA (Continued)

Prep Batch: 34554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 880-34554/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2943-A-29-E MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-2943-A-29-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34619

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Total/NA	Solid	8015 NM	
890-2955-2	FS02	Total/NA	Solid	8015 NM	
890-2955-3	FS03	Total/NA	Solid	8015 NM	
890-2955-4	FS04	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34582

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Soluble	Solid	DI Leach	
890-2955-2	FS02	Soluble	Solid	DI Leach	
890-2955-3	FS03	Soluble	Solid	DI Leach	
890-2955-4	FS04	Soluble	Solid	DI Leach	
MB 880-34582/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34582/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34582/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2955-1 MS	FS01	Soluble	Solid	DI Leach	
890-2955-1 MSD	FS01	Soluble	Solid	DI Leach	

Analysis Batch: 34594

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2955-1	FS01	Soluble	Solid	300.0	34582
890-2955-2	FS02	Soluble	Solid	300.0	34582
890-2955-3	FS03	Soluble	Solid	300.0	34582
890-2955-4	FS04	Soluble	Solid	300.0	34582
MB 880-34582/1-A	Method Blank	Soluble	Solid	300.0	34582
LCS 880-34582/2-A	Lab Control Sample	Soluble	Solid	300.0	34582
LCSD 880-34582/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34582
890-2955-1 MS	FS01	Soluble	Solid	300.0	34582
890-2955-1 MSD	FS01	Soluble	Solid	300.0	34582

Client: Ensolum

Project/Site: ADU 624-641

Job ID: 890-2955-1

SDG: 03E1558026/O3E1558062

Client Sample ID: FS01

Date Received: 09/14/22 11:40

Date Collected: 09/14/22 09:35

Lab Sample ID: 890-2955-1

Matrix: Solid

Batch Batch Dil Initial Final Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 34407 Total/NA Prep 4.99 g 5 mL 09/15/22 12:00 MR **EET MID** 8021B MR Total/NA Analysis 50 5 mL 5 mL 34550 09/15/22 13:29 **EET MID** Total/NA Analysis Total BTEX 34599 09/15/22 14:47 SM EET MID 1 Total/NA 8015 NM 34619 09/15/22 17:29 **EET MID** Analysis 1 SM Total/NA 8015NM Prep 34554 09/15/22 08:44 EET MID Prep 10.00 g 10 mL DM Total/NA Analysis 8015B NM 1 uL 1 uL 34548 09/15/22 13:27 SM **EET MID** Soluble DI Leach 4.97 g 50 mL 34582 09/15/22 11:12 SMC EET MID Leach Soluble Analysis 300.0 5 34594 09/15/22 12:52 СН **EET MID**

Client Sample ID: FS02

Date Collected: 09/14/22 08:35

Date Received: 09/14/22 11:40

Lab Sample ID: 890-2955-2

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	34407	09/15/22 12:00	MR	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	34550	09/15/22 13:49	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34599	09/15/22 14:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			34619	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 12:46	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34582	09/15/22 11:12	SMC	EET MIC
Soluble	Analysis	300.0		5			34594	09/15/22 13:06	CH	EET MID

Client Sample ID: FS03

Date Collected: 09/14/22 09:40 Date Received: 09/14/22 11:40

Lab Sample	ID: 890-2955-3
------------	----------------

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	34407	09/15/22 12:00	MR	EET MID
Total/NA	Analysis	8021B		50	5 mL	5 mL	34550	09/15/22 14:10	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34599	09/15/22 14:47	SM	EET MID
Total/NA	Analysis	8015 NM		1			34619	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	34548	09/15/22 13:06	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		5			34594	09/15/22 13:11	CH	EET MID

Client Sample ID: FS04

Date Collected: 09/14/22 09:45 Date Received: 09/14/22 11:40

Lab Sample ID: 890-2955-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	34407	09/15/22 12:00	MR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	34550	09/15/22 14:30	MR	EET MID
Total/NA	Analysis	Total BTEX		1			34599	09/15/22 14:47	SM	EET MID

Lab Chronicle

Client: Ensolum

Job ID: 890-2955-1

Project/Site: ADI I 624-641

SDG: 03E1558026/03E1558062

Project/Site: ADU 624-641 SDG: 03E1558026/O3E1558062

Client Sample ID: FS04 Lab Sample ID: 890-2955-4

Date Collected: 09/14/22 09:45
Date Received: 09/14/22 11:40
Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34619	09/15/22 17:29	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34554	09/15/22 08:44	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34548	09/15/22 12:25	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34582	09/15/22 11:12	SMC	EET MID
Soluble	Analysis	300.0		5			34594	09/15/22 13:16	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-2955-1 Project/Site: ADU 624-641

SDG: 03E1558026/O3E1558062

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 06-30-23	
Texas	NE	ELAP	T104704400-22-24		
The following analytes the agency does not of	' '	it the laboratory is not certifi	ied by the governing authority. This list ma	ay include analytes f	
Analysis Method	Prep Method	Matrix	Analyte		
			Total TPH		
8015 NM		Solid	Total TPH		

Method Summary

Client: Ensolum

Project/Site: ADU 624-641

Job ID: 890-2955-1

SDG: 03E1558026/O3E1558062

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

Protocol References:

ASTM = ASTM International

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

TAL SOP = TestAmerica Laboratories, Standard Operating Procedure

Laboratory References:

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

Eurofins Carlsbad

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Sample Summary

Client: Ensolum

Project/Site: ADU 624-641

Job ID: 890-2955-1

SDG: 03E1558026/O3E1558062

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Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-2955-1	FS01	Solid	09/14/22 09:35	09/14/22 11:40	4.5
890-2955-2	FS02	Solid	09/14/22 08:35	09/14/22 11:40	4
890-2955-3	FS03	Solid	09/14/22 09:40	09/14/22 11:40	4.5
890-2955-4	FS04	Solid	09/14/22 09:45	09/14/22 11:40	4.5

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0

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4.0

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Revised Date 08/25/2020 Rev. 2020.2

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time 9.14.22

Received by; (Signature)

(Signature)

Chain of Custody

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

Environment Testing

💸 eurofins

Work Order No:

Project Manager:	Kale Jennings	Minas		Bill to: (if different)	ifferent)	<u>د</u>	AALL	さ	Garrett Green		Work Order Comments	Comments	
	Ensolum, LLC	277		Company Name:	Name:	^	410	R	XTO Energies	Program: UST/PST	r□ PRP□ Br	UST/PST ☐ PRP ☐ Brownfields ☐ RRC ☐ Si	Superfund
Address: 312	3122 Not'I Parks Hay	Parks H		Address:		3	04 E	- Gre	3104 F Greene St		[[
City, State ZIP:	Carlsbad, NM 8822	M 88	220	City, State ZIP:	ZIP:	2	rish	1/1/2	Carlsbad, NM BB220		☐ LevelⅢ☐	ST	evel IV
Phone:	817-663 2503	2503	Email:	K	nur	356	Jens	cium	Kjennings Gensolum.com	Deliverables: EDD	_	ADaPT 🔲 Other:	
Project Name	AN 1-24/1041	1 4 6	Turn	Turn Around					ANALYSIS REQUEST			Preservative Codes	8
er:	03E1558026/63E155802 Routine	3E15580	7 ☐Routine	Rush	Pres. Code	s a						None: NO DI W	DI Water: H ₂ O
Project Location: 32	32.533.18, -104.2018 Due Date:	104.2018	Due Date:	1 day	.5			_				Cool: Cool	MeOH: Me
	Meredital	Rober 15	TAT starts the day received by	day received	by								HNO 3: HN
PO #:			the lab, if received by 4:30pm	ived by 4:30							-	H2S04:H2 NaOl	NaOH: Na
SAMPLE RECEIPT	Temp Blank:	Yes) No	Wet Ice:	V Yes No	o eter	1022		_				H ₃ PO ₄ : HP	
Samples Received Intact:	(Yes) No	Thermometer ID:	F	MMOST		I LUE C		2				NaHSO 4: NABIS	
Cooler Custody Seals:	Yes No N/A	Correction Factor		9	(a)	n :		2k				Na25203: NaSO 3	
Sample Custody Seals:	Yes No N/A	Temperature Reading:	e Reading:	9.6	~	7		ن إد			_	Zn Acetate+NaOH: Zn	
Total Containers:)	Corrected T	Corrected Temperature:	7.6		K =	Ha	01	880-2822	890-2955 Chain of Custody		NaOH+Ascorbic Acid: SAPC	PC
Sample Identification	Matrix	x Sampled	Time Sampled	Depth	Grab/ # of Comp Cont	78 78	17	YO				Sample Comments	ıts
FSOi	8	9/14/23	3 0935	45	ن	X	X	X				Meident 45:	
ES02	C	1	14/33 0835	4	J	X	X	X				NAPPZ123634554	554
CS03	CI	¢-	14/23 0940	4.5	_ ට	X	X	X				NAPP 2215449179	11.19
4077	5	0	114133 0945	4.5	<u>ට</u>	X	X	X					
								JANA .				Cast Comer (s)	:
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	1											1136141001	
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Notice: Signature of this document and relinquishment of samples and subcontractors. It assigns standard terms and conditions of service. 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 survivors. 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.

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2955-1

SDG Number: 03E1558026/O3E1558062

List Source: Eurofins Carlsbad

Login Number: 2955 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	

Released to Imaging: 2/15/2023 1:40:53 PM

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2955-1

SDG Number: 03E1558026/O3E1558062

List Source: Eurofins Midland

Login Number: 2955 List Number: 2 List Creation: 09/15/22 10:32 AM Creator: Rodriguez, Leticia

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

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<6mm (1/4").



Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-2983-1

Laboratory Sample Delivery Group: 03E1558026/03E1558062

Client Project/Site: ADU 624/641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 9/27/2022 10:23:10 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: ADU 624/641 Laboratory Job ID: 890-2983-1 SDG: 03E1558026/03E1558062

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Definitions/Glossary

Client: Ensolum Job ID: 890-2983-1
Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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Qualifiers

GC VOA

 Qualifier
 Qualifier Description

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

*1 LCS/LCSD RPD exceeds control limits.
F1 MS and/or MSD recovery exceeds control

F1 MS and/or MSD recovery exceeds control limits.

S1+ Surrogate recovery exceeds control limits, high biased.

U Indicates the analyte was analyzed for but not detected.

GC Semi VOA

 Qualifier
 Qualifier Description

 F1
 MS and/or MSD recovery exceeds control limits.

 F2
 MS/MSD RPD exceeds control limits

U Indicates the analyte was analyzed for but not detected.

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.

Eisted 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

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Case Narrative

Client: Ensolum

Project/Site: ADU 624/641

Job ID: 890-2983-1

SDG: 03E1558026/03E1558062

Job ID: 890-2983-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-2983-1

Receipt

The samples were received on 9/15/2022 3:09 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35106 and analytical batch 880-35227 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS09 (890-2983-11). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: LCSD biased low. Since only an acceptable LCS is required per the method, the data has been qualified and reported. (LCSD 880-35199/2-A)

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 880-35199 and analytical batch 880-35329 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: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34748 and analytical batch 880-34751 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34930 and 880-34930 and analytical batch 880-35027 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-34671 and analytical batch 880-34985 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.

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Client Sample Results

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Lab Sample ID: 890-2983-1

Client Sample ID: SW01 Date Collected: 09/12/22 13:15 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
Toluene	<0.00199	U F1	0.00199	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
Ethylbenzene	<0.00199	U F1	0.00199	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
m-Xylene & p-Xylene	<0.00398	U F1	0.00398	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
Xylenes, Total	<0.00398	U F1	0.00398	mg/Kg		09/21/22 15:42	09/23/22 11:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	112		70 - 130			09/21/22 15:42	09/23/22 11:16	1
1,4-Difluorobenzene (Surr)	87		70 - 130			09/21/22 15:42	09/23/22 11:16	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			09/23/22 17:16	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			09/20/22 11:21	1
- Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U F1 F2	49.9	mg/Kg		09/19/22 08:34	09/19/22 18:41	1
(GRO)-C6-C10 Diesel Range Organics (Over	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 18:41	1
C10-C28)		_		99				
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 18:41	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	93		70 - 130			09/19/22 08:34	09/19/22 18:41	1
o-Terphenyl	88		70 - 130			09/19/22 08:34	09/19/22 18:41	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						

Client Sample ID: SW02 Lab Sample ID: 890-2983-2 Matrix: Solid

5.04

mg/Kg

150 F1

Date Collected: 09/12/22 13:20 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
Toluene	<0.00202	U	0.00202	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		09/21/22 15:42	09/23/22 12:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			09/21/22 15:42	09/23/22 12:38	1

Eurofins Carlsbad

09/21/22 12:42

Lab Sample ID: 890-2983-2

Client Sample Results

Client: Ensolum Job ID: 890-2983-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW02

Date Collected: 09/12/22 13:20 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
motification to a gaine compa	Julius (33)	(Continuou,

Surrogate	%Recovery Qualifier	r Limits	Prepared	Analyzed	Dil Fac
1.4-Difluorobenzene (Surr)	82	70 - 130	09/21/22 15:42	09/23/22 12:38	

Mathad:	Total	RTFY.	. Total	RTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00403	U	0.00403	ma/Ka			09/23/22 17:16	1

Method: 8015 NM - Diesel Range Organics (DRO)	(GC)
incured to the Picsci Range Organics (Dixo)	\cdot

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			09/20/22 11:21	1

Method: 8015B NM - Diese	I Range Organics	(DRO)	(GC)
moundar of ros run Sido	tungo organioo	()	1/

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 19:46	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 19:46	1
OII Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 19:46	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

	Surrogate	%Recovery	Qualifier	Limits	Prep	oared	Analyzed	Dil Fac
	1-Chlorooctane	117		70 - 130	09/19/2	22 08:34	09/19/22 19:46	1
Į	o-Terphenyl	105		70 - 130	09/19/2	22 08:34	09/19/22 19:46	1

Method: 300.0) - Anions, Io	n Chromatograp	hy - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	73.9	4.97	mg/Kg			09/21/22 13:11	1

Client Sample ID: SW04 Lab Sample ID: 890-2983-3

Date Collected: 09/12/22 13:30 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Method: 8021B - Volatile Organic Compounds (GC)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		09/21/22 15:42	09/23/22 12:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	102		70 - 130			09/21/22 15:42	09/23/22 12:58	1
1,4-Difluorobenzene (Surr)	82		70 - 130			09/21/22 15:42	09/23/22 12:58	1

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	ma/Ka			09/23/22 17:16	1

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0 U	50.0	mg/Kg			09/20/22 11:21	1

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Matrix: Solid

Lab Sample ID: 890-2983-3

Client: Ensolum Job ID: 890-2983-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW04 Date Collected: 09/12/22 13:30 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 20:08	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 20:08	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 20:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			09/19/22 08:34	09/19/22 20:08	1
o-Terphenyl	103		70 - 130			09/19/22 08:34	09/19/22 20:08	1
Method: 300.0 - Anions, Ion Chro	omatography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	498		4.98	mg/Kg			09/21/22 13:16	

Client Sample ID: SW05 Lab Sample ID: 890-2983-4 Date Collected: 09/12/22 13:35 Matrix: Solid

Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/21/22 15:42	09/23/22 13:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	113		70 - 130			09/21/22 15:42	09/23/22 13:19	1
1,4-Difluorobenzene (Surr)	88		70 - 130			09/21/22 15:42	09/23/22 13:19	1
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	mg/Kg			09/23/22 17:16	1
			0.00400	mg/Kg			09/23/22 17:16	1
Total BTEX : Method: 8015 NM - Diesel Range Analyte	Organics (DR		0.00400 RL	mg/Kg Unit	D	Prepared	09/23/22 17:16 Analyzed	
: Method: 8015 NM - Diesel Range	Organics (DR	O) (GC) Qualifier			<u>D</u>	Prepared		Dil Fac
Method: 8015 NM - Diesel Range Analyte	Organics (DR) Result <49.9	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH	e Organics (DR Result <49.9	O) (GC) Qualifier	RL	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics	e Organics (DR Result <49.9	Qualifier U RO) (GC) Qualifier	RL 49.9	<mark>Unit</mark> mg/Kg			Analyzed 09/20/22 11:21	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	e Organics (DR) Result 49.9 ge Organics (D) Result	Qualifier U RO) (GC) Qualifier U Qualifier U	RL 49.9	Unit mg/Kg		Prepared	Analyzed 09/20/22 11:21 Analyzed	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10	e Organics (DR Result <49.9 ge Organics (D Result <49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 09/19/22 08:34	Analyzed 09/20/22 11:21 Analyzed 09/19/22 20:29	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	e Organics (DR Result <49.9 ge Organics (Di Result <49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9 RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/19/22 08:34 09/19/22 08:34	Analyzed 09/20/22 11:21 Analyzed 09/19/22 20:29 09/19/22 20:29	Dil Fac
Method: 8015 NM - Diesel Range Analyte Total TPH Method: 8015B NM - Diesel Range Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	ge Organics (DR Result <49.9 ge Organics (DI Result <49.9 <49.9	Qualifier U RO) (GC) Qualifier U U U U	RL 49.9 RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 09/19/22 08:34 09/19/22 08:34	Analyzed 09/20/22 11:21 Analyzed 09/19/22 20:29 09/19/22 20:29 09/19/22 20:29	Dil Fac Dil Fac 1 Dil Fac 1 1 Dil Fac 1

Job ID: 890-2983-1

Lab Sample ID: 890-2983-4

Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW05

Date Collected: 09/12/22 13:35 Date Received: 09/15/22 15:09

Sample Depth: 0-4.5'

Method: 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17.2		4.99	mg/Kg			09/21/22 13:22	1

Client Sample ID: SW08 Lab Sample ID: 890-2983-5 Matrix: Solid

Sample Depth: 0-4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00202	U *1	0.00202	mg/Kg		09/22/22 15:49	09/24/22 21:02	-
Toluene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 21:02	
Ethylbenzene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 21:02	
m-Xylene & p-Xylene	<0.00404	U *-	0.00404	mg/Kg		09/22/22 15:49	09/24/22 21:02	
o-Xylene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 21:02	
Xylenes, Total	<0.00404	U *-	0.00404	mg/Kg		09/22/22 15:49	09/24/22 21:02	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	100		70 - 130			09/22/22 15:49	09/24/22 21:02	
1,4-Difluorobenzene (Surr)	114		70 - 130			09/22/22 15:49	09/24/22 21:02	
Method: Total BTEX - Total BTEX	Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00404	U	0.00404	mg/Kg			09/23/22 17:16	
Method: 8015 NM - Diesel Range								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total TPH	35.1		50.0	mg/Kg			09/20/22 11:21	
Method: 8015B NM - Diesel Rang	•							
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 20:50	
Diesel Range Organics (Over C10-C28)	35.1		50.0	mg/Kg		09/19/22 08:34	09/19/22 20:50	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 20:50	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	104		70 - 130			09/19/22 08:34	09/19/22 20:50	
o-Terphenyl	97		70 - 130			09/19/22 08:34	09/19/22 20:50	
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	537		4.95	mg/Kg			09/21/22 13:26	

Lab Sample ID: 890-2983-6

Client Sample Results

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW07

Date Collected: 09/13/22 13:25 Date Received: 09/15/22 15:09

Sample Depth: 0-4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
Toluene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
Ethylbenzene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
m-Xylene & p-Xylene	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
o-Xylene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
Xylenes, Total	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 21:23	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			09/22/22 15:49	09/24/22 21:23	1
1,4-Difluorobenzene (Surr)	111		70 - 130			09/22/22 15:49	09/24/22 21:23	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			09/23/22 17:16	1
Analyte Total TPH		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	49.0		=0.0					
			50.0	mg/Kg			09/20/22 11:21	1
Method: 8015B NM - Diesel Rang	ge Organics (D		50.0	mg/Kg			09/20/22 11:21	1
Method: 8015B NM - Diesel Rang Analyte	• •		50.0 R L	mg/Kg Unit	D	Prepared	09/20/22 11:21 Analyzed	1 Dil Fac
Analyte Gasoline Range Organics	• •	RO) (GC) Qualifier			<u>D</u>	Prepared 09/19/22 08:34		
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result	RO) (GC) Qualifier	RL	Unit	<u>D</u>		Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <50.0	RO) (GC) Qualifier U	RL 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	09/19/22 08:34	Analyzed 09/19/22 21:12	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <50.0 49.0	RO) (GC) Qualifier U	RL 50.0	unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34	Analyzed 09/19/22 21:12 09/19/22 21:12	Dil Fac 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34 09/19/22 08:34	Analyzed 09/19/22 21:12 09/19/22 21:12 09/19/22 21:12	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	RO) (GC) Qualifier U	RL 50.0 50.0 50.0 <i>Limits</i>	unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34 09/19/22 08:34 <i>Prepared</i>	Analyzed 09/19/22 21:12 09/19/22 21:12 09/19/22 21:12 Analyzed	Dil Face 1 1 1 Dil Face
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	RO) (GC) Qualifier U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34 09/19/22 08:34 Prepared 09/19/22 08:34	Analyzed 09/19/22 21:12 09/19/22 21:12 09/19/22 21:12 Analyzed 09/19/22 21:12	Dil Fac
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	RO) (GC) Qualifier U Qualifier	RL 50.0 50.0 50.0 Limits 70 - 130	unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34 09/19/22 08:34 Prepared 09/19/22 08:34	Analyzed 09/19/22 21:12 09/19/22 21:12 09/19/22 21:12 Analyzed 09/19/22 21:12	Dil Face 1 1 1 Dil Face

Client Sample ID: FS05

Date Collected: 09/15/22 11:55 Date Received: 09/15/22 15:09

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
Toluene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
Ethylbenzene	< 0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
m-Xylene & p-Xylene	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
o-Xylene	< 0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
Xylenes, Total	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 21:43	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			09/22/22 15:49	09/24/22 21:43	1

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Lab Sample ID: 890-2983-7

Matrix: Solid

Lab Sample ID: 890-2983-7

Client Sample Results

Client: Ensolum Job ID: 890-2983-1

Project/Site: ADI I 624/641 SDG: 03E1558026/03E1558062

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS05

Date Collected: 09/15/22 11:55 Date Received: 09/15/22 15:09

Sample Depth: 4'

Method: 8021B - Volatile Orga	nic Compounds	(GC) (C	Continued)
Welliod. 002 ID - Volalile Orga	inc compounds	100/10	Jonania Cu j

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	110		70 - 130	09/22/22 15:49	09/24/22 21:43	1

Mathad:	Total	RTFY -	Total	RTFY	Calculation

Analyte	Result Qual		Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398 U	0.00398	ma/Ka			09/23/22 17:16	1

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

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	135	49.9	mg/Kg			09/20/22 11:21	1

Mathadi 001ED	NM Discal Day	an Organian	(DBO) (CC)
Method: 8015B	nivi - Diesei Kai	ide Ordanics	IDKUI IGGI

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 21:33	1
Diesel Range Organics (Over C10-C28)	135		49.9	mg/Kg		09/19/22 08:34	09/19/22 21:33	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 21:33	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepare	ed	Analyzed	Dil
1-Chlorooctane	95		70 - 130	09/19/22 0	08:34	09/19/22 21:33	
o-Terphenyl	87		70 - 130	09/19/22 ()8:34	09/19/22 21:33	

Method: 300.0 - Anions,	Ion Chromato	graphy	y - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	515		4.95	mg/Kg			09/21/22 18:36	1

Client Sample ID: FS06

Lab Sample ID: 890-2983-8

Date Collected: 09/14/22 11:00

Matrix: Solid

Date Collected: 09/14/22 11:00 Date Received: 09/15/22 15:09

Sample Depth: 4'

Mictilod. 002 1D - Volatile Orga	inc compounds	(00)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U *1	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
Toluene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
Ethylbenzene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
m-Xylene & p-Xylene	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
o-Xylene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
Xylenes, Total	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 22:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			09/22/22 15:49	09/24/22 22:04	1
1,4-Difluorobenzene (Surr)	105		70 - 130			09/22/22 15:49	09/24/22 22:04	1
_								

Mothod:	Total RT	EY - Tota	I DTEY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			09/23/22 17:16	1

Method: 8015 NM - Diesel Range Organics (DRO) (GC)
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			09/20/22 11:21	1

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2

4

6

8

10

12

13

 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

Client Sample ID: FS06

Date Collected: 09/14/22 11:00 Date Received: 09/15/22 15:09

Sample Depth: 4'

Lab Sample ID: 890-2983-8

Matrix: Solid

Method: 8015B NM - Diesel Rang	je Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 21:55	1
(GRO)-C6-C10								
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 21:55	•
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 21:55	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	116		70 - 130			09/19/22 08:34	09/19/22 21:55	1
o-Terphenyl	107		70 - 130			09/19/22 08:34	09/19/22 21:55	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1770		24.8	mg/Kg			09/21/22 18:40	5

Client Sample ID: FS07

Date Collected: 09/15/22 12:00

Lab Sample ID: 890-2983-9

Matrix: Solid

Date Collected: 09/15/22 12:00 Date Received: 09/15/22 15:09

Occupate Develop 4

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U *1	0.00202	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
Toluene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
Ethylbenzene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
m-Xylene & p-Xylene	<0.00404	U *-	0.00404	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
o-Xylene	<0.00202	U *-	0.00202	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
Xylenes, Total	<0.00404	U *-	0.00404	mg/Kg		09/22/22 15:49	09/24/22 22:24	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	85		70 - 130			09/22/22 15:49	09/24/22 22:24	1
1,4-Difluorobenzene (Surr)	111		70 - 130			09/22/22 15:49	09/24/22 22:24	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			09/23/22 17:16	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	93.5		49.9	mg/Kg			09/20/22 11:21	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	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 22:16	1
Diesel Range Organics (Over C10-C28)	93.5		49.9	mg/Kg		09/19/22 08:34	09/19/22 22:16	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 22:16	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	103		70 - 130			09/19/22 08:34	09/19/22 22:16	1
o-Terphenyl	98		70 - 130			09/19/22 08:34	09/19/22 22:16	1

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Client Sample Results

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS07

Date Collected: 09/15/22 12:00 Date Received: 09/15/22 15:09

Sample Depth: 4'

Lab Sample ID: 890-2983-9

Matrix: Solid

Method: 300.0 - Anions, Ion Chrom								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2020		24.9	mg/Kg			09/21/22 18:45	5

Lab Sample ID: 890-2983-10 **Client Sample ID: FS08 Matrix: Solid**

Date Collected: 09/15/22 12:05 Date Received: 09/15/22 15:09

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00200	U *1	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:44	
Toluene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:44	
Ethylbenzene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:44	
m-Xylene & p-Xylene	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 22:44	
o-Xylene	<0.00200	U *-	0.00200	mg/Kg		09/22/22 15:49	09/24/22 22:44	
Xylenes, Total	<0.00399	U *-	0.00399	mg/Kg		09/22/22 15:49	09/24/22 22:44	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	93		70 - 130			09/22/22 15:49	09/24/22 22:44	
1,4-Difluorobenzene (Surr)	106		70 - 130			09/22/22 15:49	09/24/22 22:44	
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	< 0.00399	U	0.00399	mg/Kg			09/23/22 17:16	
Analyte		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fa
Total TPH	564		49.9	mg/Kg			09/20/22 11:21	
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/19/22 22:38	
(GRO)-C6-C10								
5 5	564		49.9	mg/Kg		09/19/22 08:34	09/19/22 22:38	
(GRO)-C6-C10 Diesel Range Organics (Over	564 <49.9	U	49.9 49.9	mg/Kg mg/Kg		09/19/22 08:34 09/19/22 08:34	09/19/22 22:38 09/19/22 22:38	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28)								
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	<49.9		49.9			09/19/22 08:34	09/19/22 22:38	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	<49.9 %Recovery		49.9			09/19/22 08:34 Prepared	09/19/22 22:38 Analyzed	
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	<49.9 %Recovery 122 113	Qualifier	49.9 Limits 70 - 130			09/19/22 08:34 Prepared 09/19/22 08:34	09/19/22 22:38 Analyzed 09/19/22 22:38	Dil Fac
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	<49.9 **Recovery 122 113 pmatography -	Qualifier	49.9 Limits 70 - 130		D	09/19/22 08:34 Prepared 09/19/22 08:34	09/19/22 22:38 Analyzed 09/19/22 22:38	,

 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

Client Sample ID: FS09

Lab Sample ID: 890-2983-11

Date Collected: 09/15/22 13:40
Date Received: 09/15/22 15:09

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	<0.00199	U *1	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:05	
Toluene	< 0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:05	
Ethylbenzene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:05	
m-Xylene & p-Xylene	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 23:05	
o-Xylene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:05	
Xylenes, Total	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 23:05	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	101		70 - 130			09/22/22 15:49	09/24/22 23:05	
1,4-Difluorobenzene (Surr)	137	S1+	70 - 130			09/22/22 15:49	09/24/22 23:05	
Method: Total BTEX - Total BTEX	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/23/22 17:16	
Analyte Total TPH		Qualifier	RL 50.0	Unit mg/Kg	D	Prepared	Analyzed 09/20/22 11:21	Dil Fa
			55.5	9/1.19			00/20/22 11.21	
Method: 8015B NM - Diesel Rang					_			
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 23:21	
(GRO)-C6-C10 Diesel Range Organics (Over	267		50.0	mg/Kg		09/19/22 08:34	09/19/22 23:21	
C10-C28)	201		00.0	mg/rtg		00/10/22 00:01	00/10/22 20:21	
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 23:21	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	128		70 - 130			09/19/22 08:34	09/19/22 23:21	
1-CHIOLOGCIANE								
o-Terphenyl	117		70 - 130			09/19/22 08:34	09/19/22 23:21	
		Soluble	70 - 130			09/19/22 08:34	09/19/22 23:21	
o-Terphenyl	omatography -	Soluble Qualifier	70 - 130 RL 25.2	Unit mg/Kg	<u>D</u>	09/19/22 08:34 Prepared	09/19/22 23:21 Analyzed 09/21/22 18:55	Dil Fac

Client Sample ID: FS10 Lab Sample ID: 890-2983-12

Date Collected: 09/15/22 13:45 Date Received: 09/15/22 15:09

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U *1	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
Toluene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
Ethylbenzene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
m-Xylene & p-Xylene	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
o-Xylene	<0.00199	U *-	0.00199	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
Xylenes, Total	<0.00398	U *-	0.00398	mg/Kg		09/22/22 15:49	09/24/22 23:25	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	84		70 - 130			09/22/22 15:49	09/24/22 23:25	1

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Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-2983-1
Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS10 Lab Sample ID: 890-2983-12

Date Collected: 09/15/22 13:45

Date Received: 09/15/22 15:09

Matrix: Solid

Sample Depth: 4'

Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	103		70 - 130			09/22/22 15:49	09/24/22 23:25	1
- Method: Total BTEX - Total BTE)	X Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			09/23/22 17:16	1
- Method: 8015 NM - Diesel Range	Organics (DR)	O) (GC)						
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	II	50.0	mg/Kg			09/20/22 11:21	
	\30.0	U	50.0	Hig/Kg			09/20/22 11:21	
- -			50.0	mg/Kg			09/20/22 11.21	'
Method: 8015B NM - Diesel Ranç Analyte	ge Organics (D		SU.U RL	Unit	D	Prepared	Analyzed	Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics	ge Organics (D	RO) (GC) Qualifier			<u>D</u>	Prepared 09/19/22 08:34		Dil Fac
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	ge Organics (D	RO) (GC) Qualifier	RL	Unit	<u>D</u>		Analyzed	Dil Fac 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10	ge Organics (Di Result <50.0	RO) (GC) Qualifier U	RL 50.0	<mark>Unit</mark> mg/Kg	<u>D</u>	09/19/22 08:34	Analyzed 09/19/22 23:42	Dil Fac 1 1
Method: 8015B NM - Diesel Rang Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	ge Organics (DI Result <50.0	RO) (GC) Qualifier U	RL 50.0	Unitmg/Kg	<u>D</u>	09/19/22 08:34	Analyzed 09/19/22 23:42 09/19/22 23:42	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) Oll Range Organics (Over C28-C36)	ge Organics (D) Result <50.0 <50.0	RO) (GC) Qualifier U	RL 50.0 50.0 50.0	Unit mg/Kg mg/Kg	<u>D</u>	09/19/22 08:34 09/19/22 08:34 09/19/22 08:34	Analyzed 09/19/22 23:42 09/19/22 23:42 09/19/22 23:42	1 1

Method: 300.0 - Anions, Ion Chromatography - Soluble									
	Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
	Chloride	3030	25.0	mg/Kg			09/21/22 19:00	5	

Client Sample ID: FS11

Date Collected: 09/15/22 13:50

Lab Sample ID: 890-2983-13

Matrix: Solid

Date Collected: 09/15/22 13:50 Date Received: 09/15/22 15:09

Sample Depth: 4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U *1	0.00201	mg/Kg		09/22/22 15:49	09/24/22 23:46	
Toluene	<0.00201	U *-	0.00201	mg/Kg		09/22/22 15:49	09/24/22 23:46	
Ethylbenzene	<0.00201	U *-	0.00201	mg/Kg		09/22/22 15:49	09/24/22 23:46	
m-Xylene & p-Xylene	<0.00402	U *-	0.00402	mg/Kg		09/22/22 15:49	09/24/22 23:46	
o-Xylene	<0.00201	U *-	0.00201	mg/Kg		09/22/22 15:49	09/24/22 23:46	
Xylenes, Total	<0.00402	U *-	0.00402	mg/Kg		09/22/22 15:49	09/24/22 23:46	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)			70 - 130			09/22/22 15:49	09/24/22 23:46	
1,4-Difluorobenzene (Surr)	122		70 - 130			09/22/22 15:49	09/24/22 23:46	
- Method: Total BTEX - Total B1	ΓEX Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			09/23/22 17:16	
Method: 8015 NM - Diesel Rar	nge Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
			49.9	mg/Kg			09/20/22 11:21	

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Client Sample Results

Job ID: 890-2983-1 Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS11 Lab Sample ID: 890-2983-13 Date Collected: 09/15/22 13:50

Matrix: Solid

Sample Depth: 4'

Date Received: 09/15/22 15:09

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/20/22 00:04	1
(GRO)-C6-C10								
Diesel Range Organics (Over	50.2		49.9	mg/Kg		09/19/22 08:34	09/20/22 00:04	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/19/22 08:34	09/20/22 00:04	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	107		70 - 130			09/19/22 08:34	09/20/22 00:04	1
o-Terphenyl	102		70 - 130			09/19/22 08:34	09/20/22 00:04	1
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2880		24.8	mg/Kg			09/21/22 19:05	5

Surrogate Summary

 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-2965-A-1-E MS	Matrix Spike	82	109	
890-2965-A-1-F MSD	Matrix Spike Duplicate	81	111	
890-2983-1	SW01	112	87	
890-2983-1 MS	SW01	114	108	
890-2983-1 MSD	SW01	128	109	
890-2983-2	SW02	111	82	
890-2983-3	SW04	102	82	
890-2983-4	SW05	113	88	
890-2983-5	SW08	100	114	
890-2983-6	SW07	95	111	
890-2983-7	FS05	78	110	
890-2983-8	FS06	84	105	
890-2983-9	FS07	85	111	
890-2983-10	FS08	93	106	
890-2983-11	FS09	101	137 S1+	
890-2983-12	FS10	84	103	
890-2983-13	FS11	113	122	
LCS 880-35106/1-A	Lab Control Sample	116	110	
LCS 880-35199/1-A	Lab Control Sample	85	108	
LCSD 880-35106/2-A	Lab Control Sample Dup	111	107	
LCSD 880-35199/2-A	Lab Control Sample Dup	84	101	
MB 880-35106/5-A	Method Blank	100	82	
MB 880-35199/5-A	Method Blank	103	119	
Surrogate Legend				

BFB = 4-Bromofluorobenzene (Surr)

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-2983-1	SW01	93	88
890-2983-1 MS	SW01	104	91
890-2983-1 MSD	SW01	106	81
890-2983-2	SW02	117	105
890-2983-3	SW04	116	103
890-2983-4	SW05	101	94
890-2983-5	SW08	104	97
890-2983-6	SW07	100	95
890-2983-7	FS05	95	87
890-2983-8	FS06	116	107
890-2983-9	FS07	103	98
890-2983-10	FS08	122	113
890-2983-11	FS09	128	117
890-2983-12	FS10	99	95
890-2983-13	FS11	107	102
LCS 880-34748/2-A	Lab Control Sample	107	83

Surrogate Summary

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

Matrix: Solid Prep Type: Total/NA

		1001	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
LCSD 880-34748/3-A	Lab Control Sample Dup	119	104
MB 880-34748/1-A	Method Blank	95	92
Surrogate Legend			
1CO = 1-Chlorooctane			
OTPH = o-Terphenyl			

Client: Ensolum Job ID: 890-2983-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35106/5-A

Lab Sample ID: LCS 880-35106/1-A

Matrix: Solid

Analysis Batch: 35227

Matrix: Solid Analysis Batch: 35227 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35106

	IVID	IVID						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 10:54	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/21/22 15:42	09/23/22 10:54	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/21/22 15:42	09/23/22 10:54	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/21/22 15:42	09/23/22 10:54	1

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MD MD

Surrogate	%Recovery	Qualifier	Limits	Prepared	l Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/21/22 15	:42 09/23/22 10:54	1
1,4-Difluorobenzene (Surr)	82		70 - 130	09/21/22 15	:42 09/23/22 10:54	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35106

Prep Batch: 35106

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09892		mg/Kg		99	70 - 130	
Toluene	0.100	0.08708		mg/Kg		87	70 - 130	
Ethylbenzene	0.100	0.09190		mg/Kg		92	70 - 130	
m-Xylene & p-Xylene	0.200	0.1865		mg/Kg		93	70 - 130	
o-Xylene	0.100	0.1078		mg/Kg		108	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	116	70 - 130
1,4-Difluorobenzene (Surr)	110	70 - 130

Lab Sample ID: LCSD 880-35106/2-A **Client Sample ID: Lab Control Sample Dup** Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 35227

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.08322		mg/Kg		83	70 - 130	17	35
Toluene	0.100	0.07379		mg/Kg		74	70 - 130	17	35
Ethylbenzene	0.100	0.07693		mg/Kg		77	70 - 130	18	35
m-Xylene & p-Xylene	0.200	0.1549		mg/Kg		77	70 - 130	19	35
o-Xylene	0.100	0.08963		mg/Kg		90	70 - 130	18	35

LCSD LCSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	111	70 - 130
1.4-Difluorobenzene (Surr)	107	70 - 130

Lab Sample ID: 890-2983-1 MS

Matrix: Solid

Analysis Batch: 35227

Client Sample ID: SW01 Prep Type: Total/NA

Prep Batch: 35106

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00199	U	0.101	0.07743		mg/Kg		77	70 - 130	
Toluene	< 0.00199	U F1	0.101	0.06299	F1	mg/Kg		62	70 - 130	

QC Sample Results

 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

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

Lab Sample ID: 890-2983-1 MS Matrix: Solid

Analysis Batch: 35227

Client Sample ID: SW01
Prep Type: Total/NA

Prep Batch: 35106

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00199 U F1 0.101 0.06867 F1 68 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00398 0.202 0.1219 F1 mg/Kg 60 70 - 130 <0.00199 U 0.101 o-Xylene 0.08513 mg/Kg 84 70 - 130

MS MS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	114		70 - 130
1,4-Difluorobenzene (Surr)	108		70 - 130

Lab Sample ID: 890-2983-1 MSD

Matrix: Solid

Analysis Batch: 35227

Client Sample ID: SW01
Prep Type: Total/NA

Prep Batch: 35106

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier %Rec Limits RPD Limit Analyte Unit 0.0996 0.08097 Benzene <0.00199 U mg/Kg 81 70 - 130 4 35 Toluene 0.0996 0.06641 F1 67 70 - 130 35 <0.00199 UF1 mg/Kg 5 Ethylbenzene <0.00199 UF1 0.0996 0.07279 mg/Kg 73 70 - 130 6 35 0.199 0.1252 F1 63 70 - 130 35 m-Xylene & p-Xylene <0.00398 UF1 mg/Kg 3 0.0996 o-Xylene <0.00199 U 0.09141 92 70 - 130 mg/Kg

MSD MSD

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	128	70 _ 130
1,4-Difluorobenzene (Surr)	109	70 - 130

Lab Sample ID: MB 880-35199/5-A

Matrix: Solid

Analysis Batch: 35329

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35199

MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/22/22 15:49	09/24/22 15:38	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/22/22 15:49	09/24/22 15:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/22/22 15:49	09/24/22 15:38	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/22/22 15:49	09/24/22 15:38	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	103		70 - 130	09/22/22 15:49	09/24/22 15:38	1
1,4-Difluorobenzene (Surr)	119		70 - 130	09/22/22 15:49	09/24/22 15:38	1

Lab Sample ID: LCS 880-35199/1-A

Matrix: Solid

Analysis Batch: 35329

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35199

	Spike	LCS	LCS			%Rec	
Analyte	Added	Result	Qualifier L	Jnit D	%Rec	Limits	
Benzene	0.100	0.1041	n	ng/Kg	104	70 - 130	
Toluene	0.100	0.08298	n	ng/Kg	83	70 - 130	
Ethylbenzene	0.100	0.07948	n	ng/Kg	79	70 - 130	
m-Xylene & p-Xylene	0.200	0.1620	n	ng/Kg	81	70 - 130	

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QC Sample Results

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

Lab Sample ID: LCS 880-35199/1-A **Matrix: Solid**

Lab Sample ID: LCSD 880-35199/2-A

Analysis Batch: 35329

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

LCS LCS

Prep Batch: 35199 %Rec

Spike Analyte Added Result Qualifier Unit %Rec Limits D 0.100 0.08134 81 70 - 130 o-Xylene mg/Kg

LCS LCS Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 85 70 - 130 70 - 130 1,4-Difluorobenzene (Surr) 108

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Matrix: Solid Analysis Batch: 35329 Prep Batch: 35199

Spike LCSD LCSD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit Benzene 0.100 0.07166 mg/Kg 72 70 - 130 37 35 Toluene 0.100 0.05980 *mg/Kg 60 70 - 130 32 35 Ethylbenzene 0.100 0.05660 *mg/Kg 57 70 - 130 34 35 0.1165 *m-Xylene & p-Xylene 0.200 mg/Kg 58 70 - 130 33 35 0.100 0.06050 *-60 70 - 130 29 35 o-Xylene mg/Kg

LCSD LCSD Surrogate %Recovery Qualifier Limits 4-Bromofluorobenzene (Surr) 84 70 - 130 1,4-Difluorobenzene (Surr) 101 70 - 130

Lab Sample ID: 890-2965-A-1-E MS Client Sample ID: Matrix Spike **Matrix: Solid**

Analysis Batch: 35329

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00202	U *1	0.0998	0.09137		mg/Kg		91	70 - 130	
Toluene	<0.00202	U *-	0.0998	0.07416		mg/Kg		73	70 - 130	
Ethylbenzene	<0.00202	U *- F1	0.0998	0.06651	F1	mg/Kg		66	70 - 130	
m-Xylene & p-Xylene	<0.00404	U *- F1	0.200	0.1323	F1	mg/Kg		65	70 - 130	
o-Xylene	<0.00202	U *- F1	0.0998	0.06601	F1	mg/Kg		65	70 - 130	

MS MS Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 82 70 - 130 1,4-Difluorobenzene (Surr) 109

Lab Sample ID: 890-2965-A-1-F MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA **Matrix: Solid**

Analysis Batch: 35329

Analysis Batch: 35329									Prep	Batch:	35199
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00202	U *1	0.100	0.09751		mg/Kg		96	70 - 130	7	35
Toluene	<0.00202	U *-	0.100	0.07203		mg/Kg		70	70 - 130	3	35
Ethylbenzene	<0.00202	U *- F1	0.100	0.06391	F1	mg/Kg		63	70 - 130	4	35
m-Xylene & p-Xylene	<0.00404	U *- F1	0.201	0.1265	F1	mg/Kg		62	70 - 130	5	35
o-Xylene	<0.00202	U *- F1	0.100	0.06225	F1	mg/Kg		61	70 - 130	6	35

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Prep Type: Total/NA Prep Batch: 35199

Job ID: 890-2983-1

SDG: 03E1558026/03E1558062

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

Lab Sample ID: 890-2965-A-1-F MSD

Matrix: Solid

Client: Ensolum

Analysis Batch: 35329

Project/Site: ADU 624/641

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Prep Batch: 35199

MSD MSD

%Recovery Qualifier Surrogate Limits 4-Bromofluorobenzene (Surr) 81 70 - 130 1,4-Difluorobenzene (Surr) 111 70 - 130

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

Lab Sample ID: MB 880-34748/1-A

Matrix: Solid

Analysis Batch: 34751

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 34748

мв мв

Analyte Res	sult	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
3 - 3	0.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 17:37	1
(GRO)-C6-C10 Diesel Range Organics (Over <5	0.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 17:37	1
C10-C28) Oll Range Organics (Over C28-C36) <5	0.0	U	50.0	mg/Kg		09/19/22 08:34	09/19/22 17:37	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	09/19/22 08:34	09/19/22 17:37	1
o-Terphenyl	92		70 - 130	09/19/22 08:34	09/19/22 17:37	1

Lab Sample ID: LCS 880-34748/2-A Client Comple ID: Lab Control Comple

Matrix: Solid

Analysis Batch: 34751

Cilent 3	ample ib. Lab Control Sample
	Prep Type: Total/NA
	Prep Batch: 34748
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ı		Spike	LUS	LUS				%Rec	
	Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
	Gasoline Range Organics	1000	966.7		mg/Kg		97	70 - 130	
ı	(GRO)-C6-C10								
	Diesel Range Organics (Over	1000	894.2		mg/Kg		89	70 - 130	
١	C10-C28)								

	LC3 L	-03	
Surrogate	%Recovery (Qualifier	Limits
1-Chlorooctane	107		70 - 130
o-Terphenyl	83		70 - 130

Lab Sample ID: LCSD 880-34748/3-A **Client Sample ID: Lab Control Sample Dup**

Matrix: Solid

Analysis Batch: 34751

Prep Type: Total/NA

Prep Batch: 34748

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	959.7		mg/Kg		96	70 - 130	1	20
(GRO)-C6-C10									
Diesel Range Organics (Over	1000	1007		mg/Kg		101	70 - 130	12	20
C10 C28)									

LCSD LCSD

100 100

Surrogate	%Recovery Qualifier	r Limits
1-Chlorooctane	119	70 - 130
o-Terphenyl	104	70 - 130

Job ID: 890-2983-1

Client: Ensolum SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

Lab Sample ID: 890-2983-1 MS

Matrix: Solid Analysis Batch: 34751 Client Sample ID: SW01 Prep Type: Total/NA

Prep Batch: 34748

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	<49.9	U F1 F2	996	1326	F1	mg/Kg		131	70 - 130	
(GRO)-C6-C10										
Diesel Range Organics (Over	<49.9	U	996	1147		mg/Kg		112	70 - 130	
C10-C28)										

MS MS Qualifier Limits Surrogate %Recovery 70 - 130 1-Chlorooctane 104 o-Terphenyl 91 70 - 130

Lab Sample ID: 890-2983-1 MSD Client Sample ID: SW01

Analysis Batch: 34751

Matrix: Solid Prep Type: Total/NA Prep Batch: 34748

Spike MSD MSD %Rec RPD Sample Sample Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit <49.9 U F1 F2 999 104 Gasoline Range Organics 1065 F2 mg/Kg 70 - 130 22 20 (GRO)-C6-C10 Diesel Range Organics (Over <49.9 U 999 1018 mg/Kg 99 70 - 130 12 20 C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 106 70 - 130 81 70 - 130 o-Terphenyl

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34671/1-A Client Sample ID: Method Blank **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 34985

MB MB

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 09/21/22 16:39 mg/Kg

Lab Sample ID: LCS 880-34671/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34985

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit D %Rec Limits Chloride 250 250.2 100 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-34671/3-A Client Sample ID: Lab Control Sample Dup Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 34985

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier D %Rec Limits RPD Limit Unit Chloride 250 250.9 100 mg/Kg 90 _ 110 20

Job ID: 890-2983-1 Client: Ensolum SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 880-19309-A-31-D MS Client Sample ID: Matrix Spike **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 34985

Sample Sample Spike MS MS %Rec Result Qualifier Analyte Added Result Qualifier Unit %Rec Limits Chloride 20700 F1 12500 38090 F1 mg/Kg 139 90 - 110

Lab Sample ID: 880-19309-A-31-E MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Soluble

Analysis Batch: 34985

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier RPD Limit Analyte Unit D %Rec Limits Chloride 20700 F1 12500 38040 F1 mg/Kg 139 90 - 110

Lab Sample ID: MB 880-34930/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35027

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Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 09/21/22 12:27 mg/Kg

Lab Sample ID: LCS 880-34930/2-A **Client Sample ID: Lab Control Sample Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35027

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chloride 250 258.6 103 90 - 110 mg/Kg

Lab Sample ID: LCSD 880-34930/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35027

LCSD LCSD Spike %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 240.8 mg/Kg 96 90 - 110

Lab Sample ID: 890-2983-1 MS Client Sample ID: SW01 **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35027

Sample Sample Spike MS MS %Rec Added Result Qualifier Qualifier Analyte Result Unit D %Rec Limits Chloride 150 F1 252 373.6 F1 mg/Kg 89 90 - 110

Lab Sample ID: 890-2983-1 MSD

Matrix: Solid

Analysis Batch: 35027

MSD MSD %Rec RPD Sample Sample Spike Added Result Qualifier Analyte Result Qualifier Limits RPD Limit Unit %Rec Chloride 150 F1 252 396.4 mg/Kg 98 90 - 110 20

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Client Sample ID: SW01

Prep Type: Soluble

 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC VOA

Prep Batch: 35106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	5035	
890-2983-2	SW02	Total/NA	Solid	5035	
890-2983-3	SW04	Total/NA	Solid	5035	
890-2983-4	SW05	Total/NA	Solid	5035	
MB 880-35106/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35106/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35106/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2983-1 MS	SW01	Total/NA	Solid	5035	
890-2983-1 MSD	SW01	Total/NA	Solid	5035	

Prep Batch: 35199

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-2983-5	SW08	Total/NA	Solid	5035	
890-2983-6	SW07	Total/NA	Solid	5035	
890-2983-7	FS05	Total/NA	Solid	5035	
890-2983-8	FS06	Total/NA	Solid	5035	
890-2983-9	FS07	Total/NA	Solid	5035	
890-2983-10	FS08	Total/NA	Solid	5035	
890-2983-11	FS09	Total/NA	Solid	5035	
890-2983-12	FS10	Total/NA	Solid	5035	
890-2983-13	FS11	Total/NA	Solid	5035	
MB 880-35199/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35199/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35199/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-2965-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-2965-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 35227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	8021B	35106
890-2983-2	SW02	Total/NA	Solid	8021B	35106
890-2983-3	SW04	Total/NA	Solid	8021B	35106
890-2983-4	SW05	Total/NA	Solid	8021B	35106
MB 880-35106/5-A	Method Blank	Total/NA	Solid	8021B	35106
LCS 880-35106/1-A	Lab Control Sample	Total/NA	Solid	8021B	35106
LCSD 880-35106/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35106
890-2983-1 MS	SW01	Total/NA	Solid	8021B	35106
890-2983-1 MSD	SW01	Total/NA	Solid	8021B	35106

Analysis Batch: 35300

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	Total BTEX	
890-2983-2	SW02	Total/NA	Solid	Total BTEX	
890-2983-3	SW04	Total/NA	Solid	Total BTEX	
890-2983-4	SW05	Total/NA	Solid	Total BTEX	
890-2983-5	SW08	Total/NA	Solid	Total BTEX	
890-2983-6	SW07	Total/NA	Solid	Total BTEX	
890-2983-7	FS05	Total/NA	Solid	Total BTEX	
890-2983-8	FS06	Total/NA	Solid	Total BTEX	
890-2983-9	FS07	Total/NA	Solid	Total BTEX	
890-2983-10	FS08	Total/NA	Solid	Total BTEX	

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 Client: Ensolum
 Job ID: 890-2983-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC VOA (Continued)

Analysis Batch: 35300 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-11	FS09	Total/NA	Solid	Total BTEX	
890-2983-12	FS10	Total/NA	Solid	Total BTEX	
890-2983-13	FS11	Total/NA	Solid	Total BTEX	

Analysis Batch: 35329

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-5	SW08	Total/NA	Solid	8021B	35199
890-2983-6	SW07	Total/NA	Solid	8021B	35199
890-2983-7	FS05	Total/NA	Solid	8021B	35199
890-2983-8	FS06	Total/NA	Solid	8021B	35199
890-2983-9	FS07	Total/NA	Solid	8021B	35199
890-2983-10	FS08	Total/NA	Solid	8021B	35199
890-2983-11	FS09	Total/NA	Solid	8021B	35199
890-2983-12	FS10	Total/NA	Solid	8021B	35199
890-2983-13	FS11	Total/NA	Solid	8021B	35199
MB 880-35199/5-A	Method Blank	Total/NA	Solid	8021B	35199
LCS 880-35199/1-A	Lab Control Sample	Total/NA	Solid	8021B	35199
LCSD 880-35199/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35199
890-2965-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35199
890-2965-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35199

GC Semi VOA

Prep Batch: 34748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	8015NM Prep	
890-2983-2	SW02	Total/NA	Solid	8015NM Prep	
890-2983-3	SW04	Total/NA	Solid	8015NM Prep	
890-2983-4	SW05	Total/NA	Solid	8015NM Prep	
890-2983-5	SW08	Total/NA	Solid	8015NM Prep	
890-2983-6	SW07	Total/NA	Solid	8015NM Prep	
890-2983-7	FS05	Total/NA	Solid	8015NM Prep	
890-2983-8	FS06	Total/NA	Solid	8015NM Prep	
890-2983-9	FS07	Total/NA	Solid	8015NM Prep	
890-2983-10	FS08	Total/NA	Solid	8015NM Prep	
890-2983-11	FS09	Total/NA	Solid	8015NM Prep	
890-2983-12	FS10	Total/NA	Solid	8015NM Prep	
890-2983-13	FS11	Total/NA	Solid	8015NM Prep	
MB 880-34748/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-34748/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-34748/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-2983-1 MS	SW01	Total/NA	Solid	8015NM Prep	
890-2983-1 MSD	SW01	Total/NA	Solid	8015NM Prep	

Analysis Batch: 34751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	8015B NM	34748
890-2983-2	SW02	Total/NA	Solid	8015B NM	34748
890-2983-3	SW04	Total/NA	Solid	8015B NM	34748
890-2983-4	SW05	Total/NA	Solid	8015B NM	34748
890-2983-5	SW08	Total/NA	Solid	8015B NM	34748

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Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

GC Semi VOA (Continued)

Analysis Batch: 34751 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-6	SW07	Total/NA	Solid	8015B NM	34748
890-2983-7	FS05	Total/NA	Solid	8015B NM	34748
890-2983-8	FS06	Total/NA	Solid	8015B NM	34748
890-2983-9	FS07	Total/NA	Solid	8015B NM	34748
890-2983-10	FS08	Total/NA	Solid	8015B NM	34748
890-2983-11	FS09	Total/NA	Solid	8015B NM	34748
890-2983-12	FS10	Total/NA	Solid	8015B NM	34748
890-2983-13	FS11	Total/NA	Solid	8015B NM	34748
MB 880-34748/1-A	Method Blank	Total/NA	Solid	8015B NM	34748
LCS 880-34748/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	34748
LCSD 880-34748/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	34748
890-2983-1 MS	SW01	Total/NA	Solid	8015B NM	34748
890-2983-1 MSD	SW01	Total/NA	Solid	8015B NM	34748

Analysis Batch: 34936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Total/NA	Solid	8015 NM	
890-2983-2	SW02	Total/NA	Solid	8015 NM	
890-2983-3	SW04	Total/NA	Solid	8015 NM	
890-2983-4	SW05	Total/NA	Solid	8015 NM	
890-2983-5	SW08	Total/NA	Solid	8015 NM	
890-2983-6	SW07	Total/NA	Solid	8015 NM	
890-2983-7	FS05	Total/NA	Solid	8015 NM	
890-2983-8	FS06	Total/NA	Solid	8015 NM	
890-2983-9	FS07	Total/NA	Solid	8015 NM	
890-2983-10	FS08	Total/NA	Solid	8015 NM	
890-2983-11	FS09	Total/NA	Solid	8015 NM	
890-2983-12	FS10	Total/NA	Solid	8015 NM	
890-2983-13	FS11	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-6	SW07	Soluble	Solid	DI Leach	
890-2983-7	FS05	Soluble	Solid	DI Leach	
890-2983-8	FS06	Soluble	Solid	DI Leach	
890-2983-9	FS07	Soluble	Solid	DI Leach	
890-2983-10	FS08	Soluble	Solid	DI Leach	
890-2983-11	FS09	Soluble	Solid	DI Leach	
890-2983-12	FS10	Soluble	Solid	DI Leach	
890-2983-13	FS11	Soluble	Solid	DI Leach	
MB 880-34671/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34671/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34671/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-19309-A-31-D MS	Matrix Spike	Soluble	Solid	DI Leach	
880-19309-A-31-E MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 34930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Soluble	Solid	DI Leach	

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

HPLC/IC (Continued)

Leach Batch: 34930 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-2	SW02	Soluble	Solid	DI Leach	
890-2983-3	SW04	Soluble	Solid	DI Leach	
890-2983-4	SW05	Soluble	Solid	DI Leach	
890-2983-5	SW08	Soluble	Solid	DI Leach	
MB 880-34930/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34930/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34930/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-2983-1 MS	SW01	Soluble	Solid	DI Leach	
890-2983-1 MSD	SW01	Soluble	Solid	DI Leach	

Analysis Batch: 34985

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-6	SW07	Soluble	Solid	300.0	34671
890-2983-7	FS05	Soluble	Solid	300.0	34671
890-2983-8	FS06	Soluble	Solid	300.0	34671
890-2983-9	FS07	Soluble	Solid	300.0	34671
890-2983-10	FS08	Soluble	Solid	300.0	34671
890-2983-11	FS09	Soluble	Solid	300.0	34671
890-2983-12	FS10	Soluble	Solid	300.0	34671
890-2983-13	FS11	Soluble	Solid	300.0	34671
MB 880-34671/1-A	Method Blank	Soluble	Solid	300.0	34671
LCS 880-34671/2-A	Lab Control Sample	Soluble	Solid	300.0	34671
LCSD 880-34671/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34671
880-19309-A-31-D MS	Matrix Spike	Soluble	Solid	300.0	34671
880-19309-A-31-E MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34671

Analysis Batch: 35027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-2983-1	SW01	Soluble	Solid	300.0	34930
890-2983-2	SW02	Soluble	Solid	300.0	34930
890-2983-3	SW04	Soluble	Solid	300.0	34930
890-2983-4	SW05	Soluble	Solid	300.0	34930
890-2983-5	SW08	Soluble	Solid	300.0	34930
MB 880-34930/1-A	Method Blank	Soluble	Solid	300.0	34930
LCS 880-34930/2-A	Lab Control Sample	Soluble	Solid	300.0	34930
LCSD 880-34930/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34930
890-2983-1 MS	SW01	Soluble	Solid	300.0	34930
890-2983-1 MSD	SW01	Soluble	Solid	300.0	34930

Project/Site: ADU 624/641

Job ID: 890-2983-1 SDG: 03E1558026/03E1558062

Lab Sample ID: 890-2983-1

Client Sample ID: SW01 Date Collected: 09/12/22 13:15 Date Received: 09/15/22 15:09

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	35106	09/21/22 15:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/23/22 11:16	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 18:41	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34930	09/20/22 10:20	KS	EET MID
Soluble	Analysis	300.0		1			35027	09/21/22 12:42	CH	EET MID

Client Sample ID: SW02 Lab Sample ID: 890-2983-2

Date Collected: 09/12/22 13:20 Date Received: 09/15/22 15:09

Matrix: Solid

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Total/NA Prep 5035 4.96 g 5 mL 35106 09/21/22 15:42 EL EET MID 8021B Total/NA Analysis 1 5 mL 5 mL 35227 09/23/22 12:38 MR EET MID Total/NA Total BTEX 35300 09/23/22 17:16 Analysis SM **EET MID** 1 Total/NA Analysis 8015 NM 34936 09/20/22 11:21 SM **EET MID** Total/NA 8015NM Prep 10.03 g 10 mL 34748 09/19/22 08:34 DM FFT MID Prep Total/NA Analysis 8015B NM 1 uL 1 uL 34751 09/19/22 19:46 SM **EET MID** Soluble 50 mL DI Leach 5.03 g 34930 09/20/22 10:20 KS **EET MID** Leach Soluble Analysis 300.0 35027 09/21/22 13:11 СН **EET MID**

Client Sample ID: SW04 Lab Sample ID: 890-2983-3

Date Collected: 09/12/22 13:30 Date Received: 09/15/22 15:09

Dil Batch Batch 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 35106 09/21/22 15:42 EL **EET MID** Total/NA Analysis 8021B 5 mL 5 mL 35227 09/23/22 12:58 MR **EET MID** Total/NA Total BTEX 35300 09/23/22 17:16 SM **EET MID** Analysis 1 Total/NA Analysis 8015 NM 34936 09/20/22 11:21 SM **EET MID** Total/NA Prep 8015NM Prep 10.00 g 10 ml 34748 09/19/22 08:34 DM **EET MID** Total/NA 8015B NM 34751 09/19/22 20:08 Analysis 1 uL 1 uL SM **EET MID** Soluble DI Leach 5.02 g 50 mL 34930 09/20/22 10:20 KS EET MID Leach Soluble Analysis 300.0 35027 09/21/22 13:16 СН **EET MID**

Lab Sample ID: 890-2983-4 Client Sample ID: SW05

Date Collected: 09/12/22 13:35 Date Received: 09/15/22 15:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	35106	09/21/22 15:42	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35227	09/23/22 13:19	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID

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Matrix: Solid

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Matrix: Solid

Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: SW05 Lab Sample ID: 890-2983-4

Date Collected: 09/12/22 13:35 Matrix: Solid Date Received: 09/15/22 15:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 20:29	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34930	09/20/22 10:20	KS	EET MID
Soluble	Analysis	300.0		1			35027	09/21/22 13:22	CH	EET MID

Client Sample ID: SW08 Lab Sample ID: 890-2983-5

Date Collected: 09/13/22 13:30 Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 21:02	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 20:50	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34930	09/20/22 10:20	KS	EET MID
Soluble	Analysis	300.0		1			35027	09/21/22 13:26	CH	EET MID

Client Sample ID: SW07 Lab Sample ID: 890-2983-6 Date Collected: 09/13/22 13:25 **Matrix: Solid**

Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 21:23	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 21:12	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 18:21	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-2983-7

Date Collected: 09/15/22 11:55 Date Received: 09/15/22 15:09

Released to Imaging: 2/15/2023 1:40:53 PM

_	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 21:43	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA Total/NA	Prep Analysis	8015NM Prep 8015B NM		1	10.03 g 1 uL	10 mL 1 uL	34748 34751	09/19/22 08:34 09/19/22 21:33	DM SM	EET MID EET MID

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Matrix: Solid

Matrix: Solid

Project/Site: ADU 624/641

Job ID: 890-2983-1 SDG: 03E1558026/03E1558062

Client Sample ID: FS05

Date Collected: 09/15/22 11:55 Date Received: 09/15/22 15:09 Lab Sample ID: 890-2983-7

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Soluble	Leach	DI Leach			5.05 g	50 mL	34671	09/16/22 10:55	CH	EET MID
Soluble	Analysis	300.0		1			34985	09/21/22 18:36	CH	EET MID

Client Sample ID: FS06 Lab Sample ID: 890-2983-8

Date Collected: 09/14/22 11:00 **Matrix: Solid**

Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 22:04	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 21:55	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 18:40	CH	EET MID

Client Sample ID: FS07 Lab Sample ID: 890-2983-9

Date Collected: 09/15/22 12:00

Date Received: 09/15/22 15:09

Matrix: Solid

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.95 g	5 mL	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 22:24	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 22:16	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 18:45	CH	EET MID

Client Sample ID: FS08 Lab Sample ID: 890-2983-10

Date Collected: 09/15/22 12:05 Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 22:44	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 22:38	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 18:50	CH	EET MID

Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS09 Lab Sample ID: 890-2983-11 Date Collected: 09/15/22 13:40 Matrix: Solid

Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 23:05	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 23:21	SM	EET MID
Soluble	Leach	DI Leach			4.96 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 18:55	CH	EET MID

Client Sample ID: FS10 Lab Sample ID: 890-2983-12 Date Collected: 09/15/22 13:45 Matrix: Solid

Date Received: 09/15/22 15:09

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 23:25	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/19/22 23:42	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	34671	09/16/22 10:55	СН	EET MID
Soluble	Analysis	300.0		5			34985	09/21/22 19:00	CH	EET MID

Client Sample ID: FS11 Lab Sample ID: 890-2983-13 Date Collected: 09/15/22 13:50 **Matrix: Solid**

Date Received: 09/15/22 15:09

	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	35199	09/22/22 15:49	MR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	35329	09/24/22 23:46	MR	EET MID
Total/NA	Analysis	Total BTEX		1			35300	09/23/22 17:16	SM	EET MID
Total/NA	Analysis	8015 NM		1			34936	09/20/22 11:21	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	34748	09/19/22 08:34	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	34751	09/20/22 00:04	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34671	09/16/22 10:55	CH	EET MIC
Soluble	Analysis	300.0		5			34985	09/21/22 19:05	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: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Laboratory: Eurofins Midland

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

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

Method Summary

Client: Ensolum Job ID: 890-2983-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

Client Sample ID

SW01

SW02

SW04

SW05

SW08

SW07

FS05

FS06

FS07

FS08

FS09

FS10

FS11

Sample Summary

Collected 09/12/22 13:15

09/12/22 13:20

09/12/22 13:30

09/12/22 13:35

09/13/22 13:30

09/13/22 13:25

09/15/22 11:55

09/14/22 11:00

09/15/22 12:00

09/15/22 12:05

09/15/22 13:40

09/15/22 13:45

09/15/22 13:50

Matrix

Solid

Client: Ensolum

Lab Sample ID

890-2983-1

890-2983-2

890-2983-3

890-2983-4

890-2983-5

890-2983-6

890-2983-7

890-2983-8

890-2983-9

890-2983-10

890-2983-11

890-2983-12

890-2983-13

Project/Site: ADU 624/641

Job ID: 890-2983-1

SDG: 03E1558026/03E1558062

Received	Depth
09/15/22 15:09	0-4.5'
09/15/22 15:09	0-4.5'
09/15/22 15:09	0-4.5'
09/15/22 15:09	0-4.5'
09/15/22 15:09	0-4'
09/15/22 15:09	0-4'
09/15/22 15:09	4'
09/15/22 15:09	4'
09/15/22 15:09	4'

4'

4'

09/15/22 15:09

09/15/22 15:09

09/15/22 15:09

09/15/22 15:09

Date/Time

Received by: (Signature)

Relinquished by: (Signature)

S

9/15/20

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. bicker. 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 frence. 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

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Environment Testing Xenco

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Work Order No:

Company Name Fine Anning Early Charlest Green Cartiology Car												
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Ves No West Temperature Reading: S. Co. A Sampled Samp	SAMPLE RECEIPT	Temp Blank:		Wet Ice:	ON ON	eters					H ₃ PO ₄ : HP	
Yes No Wide Temperature Reading: S. C.	Samples Received Intact:	(Kes) No	Thermometer IC): 	NA CR	ram		5			NaHSO 4: NA	BIS
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S 9/12/13/5 0-4-5	Total Containers:		Corrected Tem	perature:	N.				890- 2983 Chain	of Custody	NaOH+Ascor	oic Acid: SAPC
01 S 9/12/2/3/5 0-4-5 C 1 X X X X X X X X X X X X X X X X X X	Sample Identificatio		Date Sampled	Time		# of Cont					Sample	Comments
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Date/Time

Received by: (Signature)

Relinquished by: (Signature)

Date/Time 1533

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Don

1500

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Chain of Custody

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

Environment Testing

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Work Order No:

www.xenco.com

Address: 3104 F Greene St City, State ZIP: Carlsbad, NM 882 20 Ityconings Press Rush Code Depth Grab # of F S X X X X X X X X X X X X X X X X X X		Bill to: (if different) Company Name:	XTO Energy	Work Order Comments Program: UST/PST □ PRP □ Brownfields □ RRC □	ents ds RRC Superfund
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Hg: 1631 / 245.1 / 7470 / 7471 Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated. TCLP/SPLP6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Tl U Circle Method(s) and Metal(s) to be analyzed

200.8 / 6020:

Total 200.7 / 6010

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

9/27/2022

Carlsbad NM 88220 Phone 575-988-3199 Fax: 575-988-3199

1089 N Canal St

Eurofins Carlsbad

Chain of Custody Record

seurofins | Environment Testing

Project Name[,] ADU 624/641 State, Zip: TX 79701 SW05 (890-2983-4) SW02 (890-2983-2) SW01 (890-2983-1) 432-704-5440(Tel) SW07 (890-2983-6) SW08 (890-2983-5) SW04 (890-2983-3) Possible Hazard Identification tote. Since laboratory accreditations are subject to change Eurofins Environment Testing South Central, LLC places the ownership of method analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the aboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/matrix being analyzed, the samples must be shipped back to the Eurofins Environment Testing South Central. LLC laboratory or other instructions will be provided. Any changes to accreditation status should be brought to Eurofins Environment Testing South Central. LLC attention immediately. If all requested accreditations are current to date return the signed Chain of Custody attesting to said complicance to Eurofins Environment Testing South Central. LLC. FS06 (890-2983-8) FS05 (890-2983-7) Sample Identification - Client ID (Lab ID) Midland elinquished by: ⁻S07 (890-2983-9) elinquished Deliverable Requested | II III IV Other (specify) 211 W Florida Ave, mpty Kit Relinquished by Custody Seals Intact: linquished by hipping/Receiving rofins Environment Testing South Centr lient Information (Sub Contract Lab) Yes 8 S Custody Seal No Date/Time Date/Time Primary Deliverable Rank PO # Due Date Requested 9/21/2022 SSOW#: 89000093 TAT Requested (days): Phone Sample Date 9/12/22 9/12/22 9/16/22 9/16/22 9/16/22 9/16/22 9/13/22 9/12/22 9/12/22 Date Mountain 13 30 Mountain 13 30 Mountain 13 20 Mountain 13 35 Mountain 10 56 Central 10 56 Central 10 56 Central 10 56 13 15 (C=comp, G=grab) Sample Type Preservation Code: Company Company Company Matrix Solid Solid Solid Solid Solid Solid Solid Solid Solid Jessica Kramer@et.eurofinsus com E-Mail Kramer, Jessica Ime NELAP - Texas creditations Required (See note): Perform MS/MSD (Yes or No) Special Instructions/QC Requirements Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) × 8015MOD_NM/8015NM_S_Prep (MOD) Full TPH Cooler Temperature(s) °C and Other Remarks Received by × × × × × × × × × × × \times \times × × 8015MOD_Calc × × × × × × × × 300_ORGFM_28D/DI_LEACH Chloride × × × × × \times × × 8021B/5035FP_Calc (MOD) BTEX × × Analysis Requested × × × × × × × × × Total_BTEX_GCV Disposal By Lab State of Origin.
New Mexico Carrier Tracking No(s): Method of Shipment: Date/Time: Date/Time Date/Time Archive For Total Number of containers 4 4 _ _ _ -J DI Water K EDTA L EDA A HCL
B NaOH
C Nitric Acid
E NaHSO4
F MeOH
G Amchlor
H Ascorbic Acid COC No: 890-926 1 Preservation Codes 890-2983-1 Page 1 of 2 Special Instructions/Note: U - Acetone V - MCAA W - pH 4-5 Y - Trizma Z - other (specify) M Hexane
N - None
O - AsNaO2
P - Na2O4S
Q - Na2SO3
R - Na2S2O3
S H2SO4 T - TSP Dodecahydrate Company Company Ver: 06/08/2021 Months

Sampler Phone. Phone Date Requested 9/21/2022 TAT Requested (day	hain of C	Lab Kra E-M Jes	PM mer Jessica sica Kramer@i Accreditations R NELAP - Tex	as An	alysis	Carrier Tracking State of Origin: New Mexico	No(s)	COC No. 890-926 2 Page Page Page 2 of 2 Job #: 890-2983-1 Preservatio A HCL B NaOH C ZnAccess	<u> </u>
PO#. WO#: Project#. 89000093	-		MSD (Yes or No) /8015NM_S_Prep (MOD) Full TPH	28D/DI_LEACH Chloride	cv			<u>8</u> ∟×±⊙¬шоов	ci di
Sample Date	Sample (C=c Time G=g	nple (w=water S=solid, O=waste/oil, rab) BT=Tissue, A=Air	Perform MS/N 8016MOD_NM/8	300_ORGFM_28	Total_BTEX_GC				Special Instructions/Note:
9/16/22		Solid	×	× × × ×	×			<u> </u>	
9/16/22	10 56 Central 10 56	Solid		< ×	< ×			2 23	
9/16/22	10 56 Central	Solid	×	× × ×	×				
itral LLC attention imn	nediately If all reque	the samples must by	Special In	return the signed return the s	Gree may be a	g South Central, og South Central, og South Central, og south Central, or sissessed if sissessed	ints sample sniph LLC laboratory or claid complicance to aid complicance to amples are retable.	ment is torwarded unter instructions we Eurofins Environme Eurofins Environme Eurofins Environme Eurofins Environme Eurofins Environme Eurofins Environme Eurofins Eu	under chain-of-custody if the will be provided. Any changes to ment Testing South Central LLC. than 1 month; Months
	Date		Time:			Method o	f Shipment:		
Date/Time		Company			E		Date/Time		Company
Date/Time		Company	Receive Cooler	ed by: Temperature(s)	°C and Other Re	emarks	Date/Time ⁻		Company
	Sampler Phone. Phone. Phone. Poste Requested 9/21/2022 TAT Requested (day Primary Deliveral LLC attention inn Date/Time Date/Time Cample Date Sample Date Sample Date Sample Date Sample Date Date/Time Date/Time	Chain of C Sampler Phone. Phone. Phone. Po#: PO#: PO#: PO #: W/O #: Project #: 89000093 SSOW# Sample Date Time 9/16/22 Sample Central 9/16/22 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Central 10 56 Date/Time: Date/Time Date/Time Date/Time	Chain of Custody F Sampler Phone. Sample Cachinal Sample Cachinal Sample Cachinal Sample Cachinal 10 56 9/16/22 Contral Contral Contral Contral Contral Contral Date Filme Date Filme Company Company Company Company Date Filme Company	Sampler Chain of Custody Record	Chain of Custody Record Cab PM Ca	Chain of Custody Record Capta Ca	Chain of Custody Record	Chain of Custody Record Sunning Not of Stample Sunning Record Sun	Chain of Custody Record Contain of Custody Record

Ver 06/08/2021

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2983-1 SDG Number: 03E1558026/03E1558062

List Source: Eurofins Carlsbad

Login Number: 2983 List Number: 1

Creator: Stutzman, Amanda

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

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-2983-1

SDG Number: 03E1558026/03E1558062

List Source: Eurofins Midland List Creation: 09/19/22 08:28 AM

List Number: 2 Creator: Teel, Brianna

Login Number: 2983

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

<6mm (1/4").

Released to Imaging: 2/15/2023 1:40:53 PM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3003-1

Laboratory Sample Delivery Group: 03E1558026/03E1558062

Client Project/Site: ADU 624/641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/3/2022 6:52:57 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: ADU 624/641 Laboratory Job ID: 890-3003-1 SDG: 03E1558026/03E1558062

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14

Definitions/Glossary

Job ID: 890-3003-1 Client: Ensolum Project/Site: ADU 624/641

SDG: 03E1558026/03E1558062

Qualifiers

GC	VOA
Qual	ifier

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

S1+ Surrogate recovery exceeds control limits, high biased.

Qualifier Description

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Quanner	Qualifier Description
*1	LCS/LCSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

U

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These	commo	nly use	d abb	revia	ition	ıs m	ay or n	nay not b	e 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) 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 MOI 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

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: 890-3003-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Job ID: 890-3003-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3003-1

Receipt

The samples were received on 9/19/2022 3:28 PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.6°C

GC VOA

Method 8021B: Surrogate recovery for the following samples were outside control limits: FS04 (890-3003-3) and FS02 (890-3003-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method 8021B: Surrogate recovery for the following samples were outside control limits: (LCSD 880-35620/2-A) and (880-19424-A-41-E MS). Evidence of matrix interferences is not obvious.

Method 8021B: Surrogate recovery for the following sample was outside control limits: FS04 (890-3003-3). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

GC Semi VOA

Method 8015MOD_NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-35018 and analytical batch 880-35120 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

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

Matrix: Solid

Lab Sample ID: 890-3003-1

Client Sample Results

 Client: Ensolum
 Job ID: 890-3003-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

Client Sample ID: FS01

Date Collected: 09/19/22 10:40 Date Received: 09/19/22 15:28

Sample Depth: 6.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0198	U	0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
Toluene	0.0374		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
Ethylbenzene	0.653		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
m-Xylene & p-Xylene	0.0603		0.0396	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
o-Xylene	0.340		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
Xylenes, Total	0.400		0.0396	mg/Kg		09/28/22 14:52	10/01/22 14:25	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	129		70 - 130			09/28/22 14:52	10/01/22 14:25	10
1,4-Difluorobenzene (Surr)	98		70 - 130			09/28/22 14:52	10/01/22 14:25	10
- Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	1.09		0.0396	mg/Kg			10/01/22 19:44	1
Analyte Total TPH	Result	Qualifier		Unit mg/Kg	D	Prepared	Analyzed 09/23/22 16:01	Dil Fac
Total TPH	589		50.0	mg/Kg			09/23/22 16:01	1
-								'
Method: 8015B NM - Diesel Rang	e Organics (Di	RO) (GC)						,
Method: 8015B NM - Diesel Rang Analyte		RO) (GC) Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics		Qualifier		Unitmg/Kg	<u>D</u>	Prepared 09/21/22 08:32	Analyzed 09/23/22 02:18	
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result	Qualifier			<u>D</u>	<u>·</u>		1
Analyte Gasoline Range Organics	Result 185	Qualifier *1	50.0	mg/Kg	<u>D</u>	09/21/22 08:32	09/23/22 02:18	1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 185	Qualifier *1	50.0	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32	09/23/22 02:18 09/23/22 02:18	1 1
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 185 404 <50.0	Qualifier *1	50.0 50.0 50.0	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32	09/23/22 02:18 09/23/22 02:18 09/23/22 02:18	1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result 185 404 <50.0 %Recovery	Qualifier *1	50.0 50.0 50.0 <i>Limits</i>	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 Prepared	09/23/22 02:18 09/23/22 02:18 09/23/22 02:18 Analyzed	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 185 404 <50.0 %Recovery 105 95	Qualifier *1 U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u> </u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 Prepared 09/21/22 08:32	09/23/22 02:18 09/23/22 02:18 09/23/22 02:18 Analyzed 09/23/22 02:18	1 1 1 Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result 185 404 <50.0 %Recovery 105 95	Qualifier *1 U Qualifier	50.0 50.0 50.0 Limits 70 - 130	mg/Kg	<u>D</u>	09/21/22 08:32 09/21/22 08:32 09/21/22 08:32 Prepared 09/21/22 08:32	09/23/22 02:18 09/23/22 02:18 09/23/22 02:18 Analyzed 09/23/22 02:18	1 Dil Fac

Client Sample ID: FS03

Date Collected: 09/19/22 10:45

Date Received: 09/19/22 15:28

Sample Depth: 6.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.0198	U	0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
Toluene	0.0198		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
Ethylbenzene	0.190		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
m-Xylene & p-Xylene	<0.0397	U	0.0397	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
o-Xylene	0.187		0.0198	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
Xylenes, Total	0.187		0.0397	mg/Kg		09/28/22 14:52	10/01/22 14:45	10
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130			09/28/22 14:52	10/01/22 14:45	10

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Lab Sample ID: 890-3003-2

Matrix: Solid

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Matrix: Solid

Lab Sample ID: 890-3003-2

Client: Ensolum Job ID: 890-3003-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS03

Date Collected: 09/19/22 10:45 Date Received: 09/19/22 15:28

Sample Depth: 6.5'

Method: 8021B - Volatile Organic Compo	ounds (GC)	(Continued)
modification totaling organic compa	Julius (33)	(Continuou,

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	101		70 - 130	09/28/22 14:52	10/01/22 14:45	10

Method: To	tal BTFX - Tot	tal BTEX Calculation	n

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.397	0.0397	mg/Kg			10/01/22 19:44	1

Γ	
Mathad, OAR NIM	Disasi Danas Organica (DDO) (CC)

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	342	49.9	ma/Ka			09/23/22 16:01	1

Method: 8015B NM - Diesel Range Organics (DRO) (GC)
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	87.7	*1	49.9	mg/Kg		09/21/22 08:32	09/23/22 02:40	1
Diesel Range Organics (Over C10-C28)	254		49.9	mg/Kg		09/21/22 08:32	09/23/22 02:40	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/21/22 08:32	09/23/22 02:40	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	A
1-Chlorooctane	100		70 - 130	09/21/22 08:32	09/2
o-Terphenyl	91		70 - 130	09/21/22 08:32	09/2

	1-Chlorooctane	100	70 - 130	09/21/22 08:32	09/23/22 02:40	1
	o-Terphenyl	91	70 - 130	09/21/22 08:32	09/23/22 02:40	1
ì	_					
	Method: 300.0 - Anions, Ion Chron	natography - Soluble				

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3360	24.8	mg/Kg			09/22/22 18:38	5

Lab Sample ID: 890-3003-3 **Client Sample ID: FS04 Matrix: Solid**

Date Collected: 09/19/22 10:50 Date Received: 09/19/22 15:28

Sample Depth: 6.5'

Method: 8021B -	Malatile O		
I IVIATOOO' XII ZI R .	. VAISTIID I Jr	nanic Lomn	Allings Ital.1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.03		0.0497	mg/Kg		09/28/22 14:52	10/01/22 15:26	25
Toluene	1.46		0.0497	mg/Kg		09/28/22 14:52	10/01/22 15:26	25
Ethylbenzene	8.02		0.0497	mg/Kg		09/28/22 14:52	10/01/22 15:26	25
m-Xylene & p-Xylene	21.9	*+ *1	0.399	mg/Kg		09/29/22 16:18	10/03/22 18:13	100
o-Xylene	1.02		0.0497	mg/Kg		09/28/22 14:52	10/01/22 15:26	25
Xylenes, Total	30.2	*+ *1	0.399	mg/Kg		09/29/22 16:18	10/03/22 18:13	100
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	536	S1+	70 - 130			09/28/22 14:52	10/01/22 15:26	25
1,4-Difluorobenzene (Surr)	75		70 - 130			09/28/22 14:52	10/01/22 15:26	25

1,4-Dilluoroberizerie (Surr)	73	70 - 730	03/20/22 14.32
_			
Method: Total BTEX - Total BTEX Ca	Iculation		

mothodi rotal Brazil	- I = / I Galladian							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	33.4		0.399	mg/Kg			10/01/22 19:44	1

Method: 8015 NM - Diesel Ran	de Organics (DRO) (GC)

Analyte		Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH		3590		49.9	mg/Kg			09/23/22 16:01	1

Client: Ensolum Job ID: 890-3003-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS04

Lab Sample ID: 890-3003-3 Date Collected: 09/19/22 10:50

Matrix: Solid Date Received: 09/19/22 15:28

Sample Depth: 6.5'

Method: 8015B NM - Diesel Rang	e Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	1680	*1	49.9	mg/Kg		09/21/22 08:32	09/23/22 03:01	•
Diesel Range Organics (Over C10-C28)	1910		49.9	mg/Kg		09/21/22 08:32	09/23/22 03:01	•
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		09/21/22 08:32	09/23/22 03:01	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
1-Chlorooctane	118		70 - 130			09/21/22 08:32	09/23/22 03:01	
o-Terphenyl	110		70 - 130			09/21/22 08:32	09/23/22 03:01	:
Method: 300.0 - Anions, Ion Chro	matography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Chloride	1880		25.2	mg/Kg			09/22/22 18:43	5

Client Sample ID: FS02 Lab Sample ID: 890-3003-4 Matrix: Solid

Date Collected: 09/19/22 14:35

Date Received: 09/19/22 15:28

Sample Depth: 5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	0.0618		0.0504	mg/Kg		09/28/22 14:52	10/01/22 15:47	2
Toluene	6.60		0.0504	mg/Kg		09/28/22 14:52	10/01/22 15:47	2
Ethylbenzene	8.91		0.0504	mg/Kg		09/28/22 14:52	10/01/22 15:47	2
m-Xylene & p-Xylene	19.3		0.101	mg/Kg		09/28/22 14:52	10/01/22 15:47	2
o-Xylene	1.39		0.0504	mg/Kg		09/28/22 14:52	10/01/22 15:47	25
Xylenes, Total	20.7		0.101	mg/Kg		09/28/22 14:52	10/01/22 15:47	25
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	145	S1+	70 - 130			09/28/22 14:52	10/01/22 15:47	25
1,4-Difluorobenzene (Surr)	94		70 - 130			09/28/22 14:52	10/01/22 15:47	25
Method: Total BTEX - Total BTEX	(Calculation							
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	36.3		0.101	mg/Kg			10/01/22 19:44	1
Method: 8015 NM - Diesel Range	Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	3410		50.0	mg/Kg			09/23/22 16:01	1
Method: 8015B NM - Diesel Rang	ge Organics (D	RO) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
zanary to						00/04/00 00 00	00/00/00 00 00	
Gasoline Range Organics (GRO)-C6-C10	1570	*1	50.0	mg/Kg		09/21/22 08:32	09/23/22 03:23	•
Gasoline Range Organics	1570 1840	*1	50.0 50.0	mg/Kg mg/Kg		09/21/22 08:32	09/23/22 03:23	
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over								,
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	1840	U	50.0	mg/Kg		09/21/22 08:32	09/23/22 03:23	1
Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	1840 <50.0	U	50.0	mg/Kg		09/21/22 08:32 09/21/22 08:32	09/23/22 03:23 09/23/22 03:23	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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10/3/2022

Client: Ensolum

Job ID: 890-3003-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS02

Date Collected: 09/19/22 14:35 Date Received: 09/19/22 15:28

Sample Depth: 5'

Lab Sample ID: 890-3003-4

Matrix: Solid

Method: 300.0 - Anions, Ion Chron	natography -	Soluble	Method: 300.0 - Anions, Ion Chromatography - Soluble									
Analyte	Result	Qualifier	RL	Uni	t D	Prepared	Analyzed	Dil Fac				
Chloride	4300		50.5	mg/	Kg		09/22/22 18:48	10				

Client Sample ID: FS05 Lab Sample ID: 890-3003-5 Matrix: Solid

Date Collected: 09/19/22 14:40 Date Received: 09/19/22 15:28

Sample Depth: 5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.200	U *+ *1	0.200	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
Toluene	1.01	*+ *1	0.200	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
Ethylbenzene	0.492	*+ *1	0.200	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
m-Xylene & p-Xylene	6.69	*+ *1	0.399	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
o-Xylene	3.52	*+ *1	0.200	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
Xylenes, Total	10.2	*+ *1	0.399	mg/Kg		09/29/22 16:18	10/03/22 18:33	100
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			09/29/22 16:18	10/03/22 18:33	100
1,4-Difluorobenzene (Surr)	87		70 - 130			09/29/22 16:18	10/03/22 18:33	100

					D	Prepared	Analyzed	Dil Fac
Total BTEX	11.7		0.399	mg/Kg			10/01/22 19:44	1
Method: 8015 NM - Diesel Range (Organics (DR	O) (GC)						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	1940		49.9	mg/Kg			09/23/22 16:01	1
Method: 8015B NM - Diesel Range	e Organics (ປ	RO) (GC)						
motification of the bioder italigo	organios (B	, (33)						
Analyte Consider		Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Gasoline Range Organics (GRO)-C6-C10	Result 719		RL 49.9	mg/Kg	<u>D</u>	Prepared 09/21/22 08:32	Analyzed 09/23/22 03:44	Dil Fac
Gasoline Range Organics					<u> </u>			Dil Fac

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	113		70 - 130	09/21/22 08:32	09/23/22 03:44	1
o-Terphenyl	95		70 - 130	09/21/22 08:32	09/23/22 03:44	1

Method: 300.0 - Anions, Ion Chroma	tography -	Soluble						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3120		24.9	mg/Kg			09/22/22 18:53	5

Surrogate Summary

Client: Ensolum Job ID: 890-3003-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

Lab Sample ID 880-19424-A-41-E MS	Client Sample ID	BFB1 (70.130)	DFBZ1	
	Client Sample ID	(70 420)		
880-19424-A-41-E MS		(70-130)	(70-130)	
	Matrix Spike	131 S1+	108	
880-19424-A-41-F MSD	Matrix Spike Duplicate	136 S1+	109	
890-3003-1	FS01	129	98	
890-3003-2	FS03	78	101	
890-3003-3	FS04	536 S1+	75	
890-3003-4	FS02	145 S1+	94	
890-3003-5	FS05	107	87	
890-3015-A-1-E MS	Matrix Spike	101	94	
890-3015-A-1-F MSD	Matrix Spike Duplicate	108	107	
LCS 880-35620/1-A	Lab Control Sample	127	104	
LCS 880-35724/1-A	Lab Control Sample	76	73	
LCSD 880-35620/2-A	Lab Control Sample Dup	140 S1+	106	
LCSD 880-35724/2-A	Lab Control Sample Dup	128	123	
MB 880-35620/5-A	Method Blank	107	86	
MB 880-35630/5-A	Method Blank	101	89	
MB 880-35692/5-A	Method Blank	99	83	
MB 880-35724/5-A	Method Blank	100	76	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-19424-A-53-C MS	Matrix Spike	85	76	
880-19424-A-53-D MSD	Matrix Spike Duplicate	82	74	
890-3003-1	FS01	105	95	
390-3003-2	FS03	100	91	
390-3003-3	FS04	118	110	
390-3003-4	FS02	123	96	
390-3003-5	FS05	113	95	
_CS 880-35018/2-A	Lab Control Sample	113	105	
LCSD 880-35018/3-A	Lab Control Sample Dup	98	86	
MB 880-35018/1-A	Method Blank	105	103	

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-3003-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-35620/5-A

Matrix: Solid Analysis Batch: 35744 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35620

ИΒ	MB	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:52	10/01/22 07:33	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:52	10/01/22 07:33	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:52	10/01/22 07:33	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/28/22 14:52	10/01/22 07:33	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/28/22 14:52	10/01/22 07:33	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/28/22 14:52	10/01/22 07:33	1

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Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130	09/28/22 14:52	10/01/22 07:33	1
1,4-Difluorobenzene (Surr)	86		70 - 130	09/28/22 14:52	10/01/22 07:33	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 35620

Lab Sample ID: LCS 880-35620/1-A Matrix: Solid

Analysis Batch: 35744

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09300		mg/Kg		93	70 - 130	
Toluene	0.100	0.08450		mg/Kg		85	70 - 130	
Ethylbenzene	0.100	0.09159		mg/Kg		92	70 - 130	
m-Xylene & p-Xylene	0.200	0.1871		mg/Kg		94	70 - 130	
o-Xylene	0.100	0.1192		mg/Kg		119	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	127		70 - 130
1,4-Difluorobenzene (Surr)	104		70 - 130

Lab Sample ID: LCSD 880-35620/2-A

Matrix: Solid

Analysis Batch: 35744

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control San	nple Dup
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Prep Type: Total/NA

Prep Batch: 35620

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.08642		mg/Kg		86	70 - 130	7	35	
Toluene	0.100	0.08244		mg/Kg		82	70 - 130	2	35	
Ethylbenzene	0.100	0.09331		mg/Kg		93	70 - 130	2	35	
m-Xylene & p-Xylene	0.200	0.1962		mg/Kg		98	70 - 130	5	35	
o-Xylene	0.100	0.1206		mg/Kg		121	70 - 130	1	35	

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits		
4-Bromofluorobenzene (Surr)	140	S1+	70 - 130		
1 4-Difluorobenzene (Surr)	106		70 - 130		

Lab Sample ID: 880-19424-A-41-E MS

Matrix: Solid

Analysis Batch: 35744

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

Prep Batch: 35620

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00201	U	0.101	0.09638		mg/Kg	_	96	70 - 130	
Toluene	< 0.00201	U	0.101	0.08691		mg/Kg		86	70 - 130	

Client: Ensolum

Job ID: 890-3003-1 SDG: 03E1558026/03E1558062

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

Lab Sample ID: 880-19424-A-41-E MS

Project/Site: ADU 624/641

Client Sample ID: Matrix Spike **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 35744 Prep Batch: 35620

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Ethylbenzene	<0.00201	U	0.101	0.09656		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	<0.00402	U	0.202	0.1955		mg/Kg		97	70 - 130	
o-Xylene	<0.00201	U	0.101	0.1131		mg/Kg		112	70 - 130	

70 - 130

MS MS %Recovery Qualifier Limits 70 - 130 131

MR MR

мв мв Result Qualifier

U

< 0.00200

<0.00200 U

<0.00200 U

<0.00400 U

108

Lab Sample ID: 880-19424-A-41-F MSD

Surrogate

Analysis Batch: 35744

4-Bromofluorobenzene (Surr)

1,4-Difluorobenzene (Surr)

Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA Prep Batch: 35620

Sample Sample Spike MSD MSD RPD Result Qualifier RPD Limit Analyte babbA Result Qualifier Unit %Rec Limits Benzene <0.00201 U 0.0994 0.1013 mg/Kg 102 70 - 130 5 35 0.09069 Toluene <0.00201 0.0994 mg/Kg 91 70 - 130 4 35 Ethylbenzene <0.00201 U 0.0994 0.1024 103 70 - 130 35 mg/Kg 6 35 m-Xylene & p-Xylene <0.00402 U 0.199 0.2076 mg/Kg 104 70 - 130 6 <0.00201 U 0.0994 0.1207 70 - 130 o-Xylene mg/Kg 121 6

MSD MSD Surrogate Qualifier Limits %Recovery S1+ 70 - 130 4-Bromofluorobenzene (Surr) 136 1,4-Difluorobenzene (Surr) 70 - 130 109

Lab Sample ID: MB 880-35630/5-A

Analysis Batch: 35744

Client Sample ID: Method Blank **Matrix: Solid** Prep Type: Total/NA Prep Batch: 35630 MB MB

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Toluene	<0.00200	U	0.00200	mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		09/28/22 16:29	09/30/22 20:58	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		09/28/22 16:29	09/30/22 20:58	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/28/22 16:29	09/30/22 20:58	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/28/22 16:29	09/30/22 20:58	1

	INID	IVID				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130	09/28/22 16:29	09/30/22 20:58	1
1,4-Difluorobenzene (Surr)	89		70 - 130	09/28/22 16:29	09/30/22 20:58	1

RL

0.00200

0.00200

0.00200

0.00400

Lab Sample ID: MB 880-35692/5-A

Matrix: Solid

Analyte

Benzene

Toluene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 35890

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

Prepared

09/29/22 11:56

09/29/22 11:56

09/29/22 11:56

09/29/22 11:56

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Prep Batch: 35692

Analyzed Dil Fac 10/02/22 22:18 10/02/22 22:18

10/02/22 22:18

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10/02/22 22:18

QC Sample Results

Client: Ensolum Job ID: 890-3003-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

Lab Sample ID: MB 880-35692/5-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 35692

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	<0.00200	U	0.00200	mg/Kg		09/29/22 11:56	10/02/22 22:18	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		09/29/22 11:56	10/02/22 22:18	1

MR MR

MB MB

	2					
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130	09/29/22 11:56	10/02/22 22:18	1
1,4-Difluorobenzene (Surr)	83		70 - 130	09/29/22 11:56	10/02/22 22:18	1

Lab Sample ID: MB 880-35724/5-A Client Sample ID: Method Blank

Matrix: Solid

Analysis Batch: 35890

Prep Type: Total/NA

Prep Batch: 35724

мв мв Result Qualifier RL Unit Prepared Analyzed Dil Fac

Analyte Benzene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 10/03/22 08:58 Toluene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 10/03/22 08:58 10/03/22 08:58 Ethylbenzene <0.00200 U 0.00200 mg/Kg 09/29/22 16:18 m-Xylene & p-Xylene <0.00400 U 0.00400 09/29/22 16:18 10/03/22 08:58 mg/Kg 0.00200 09/29/22 16:18 10/03/22 08:58 o-Xylene <0.00200 U mg/Kg <0.00400 U Xylenes, Total 0.00400 09/29/22 16:18 10/03/22 08:58 mg/Kg

мв мв

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	100		70 - 130	09/29/22 16:	10/03/22 08:58	1
1,4-Difluorobenzene (Surr)	76		70 - 130	09/29/22 16:	18 10/03/22 08:58	1

Lab Sample ID: LCS 880-35724/1-A

Matrix: Solid

Analysis Batch: 35890

Client Sample ID: Lab Control Sample

Prep Type: Total/NA Prep Batch: 35724

	Spike	LCS	LCS				%Rec
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits
Benzene	0.100	0.07829		mg/Kg		78	70 - 130
Toluene	0.100	0.08089		mg/Kg		81	70 - 130
Ethylbenzene	0.100	0.07734		mg/Kg		77	70 - 130
m-Xylene & p-Xylene	0.200	0.1621		mg/Kg		81	70 - 130
o-Xylene	0.100	0.08300		mg/Kg		83	70 - 130

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	76	70 - 130
1,4-Difluorobenzene (Surr)	73	70 - 130

Lab Sample ID: LCSD 880-35724/2-A

Matrix: Solid Analysis Batch: 35890 Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 35724

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.1318	*+ *1	mg/Kg		132	70 - 130	51	35
Toluene	0.100	0.1408	*+ *1	mg/Kg		141	70 - 130	54	35
Ethylbenzene	0.100	0.1312	*+ *1	mg/Kg		131	70 - 130	52	35
m-Xylene & p-Xylene	0.200	0.2759	*+ *1	mg/Kg		138	70 - 130	52	35
o-Xylene	0.100	0.1422	*+ *1	mg/Kg		142	70 - 130	53	35

QC Sample Results

Client: Ensolum Job ID: 890-3003-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	128		70 - 130
1,4-Difluorobenzene (Surr)	123		70 - 130

Lab Sample ID: 890-3015-A-1-E MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 35890

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U *+ *1	0.0998	0.09073		mg/Kg		91	70 - 130	
Toluene	<0.00200	U *+ *1	0.0998	0.09593		mg/Kg		96	70 - 130	
Ethylbenzene	<0.00200	U *+ *1	0.0998	0.08487		mg/Kg		85	70 - 130	
m-Xylene & p-Xylene	<0.00401	U *+ *1	0.200	0.1756		mg/Kg		88	70 - 130	
o-Xylene	<0.00200	U *+ *1	0.0998	0.09418		mg/Kg		94	70 - 130	
o-Xylene	<0.00200	U *+ *1	0.0998	0.09418		mg/Kg		94	70 - 130	

Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 70 - 130 101 1,4-Difluorobenzene (Surr) 94 70 - 130

MS MS

Lab Sample ID: 890-3015-A-1-F MSD

Matrix: Solid

Analysis Batch: 35890

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

Prep Batch: 35724

Prep Batch: 35724

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	<0.00200	U *+ *1	0.0990	0.09916		mg/Kg		100	70 - 130	9	35
Toluene	<0.00200	U *+ *1	0.0990	0.1009		mg/Kg		102	70 - 130	5	35
Ethylbenzene	<0.00200	U *+ *1	0.0990	0.08894		mg/Kg		90	70 - 130	5	35
m-Xylene & p-Xylene	<0.00401	U *+ *1	0.198	0.1820		mg/Kg		92	70 - 130	4	35
o-Xylene	<0.00200	U *+ *1	0.0990	0.09773		mg/Kg		99	70 - 130	4	35

MSD MSD Surrogate %Recovery Qualifier Limits 70 - 130 4-Bromofluorobenzene (Surr) 108 1,4-Difluorobenzene (Surr) 107

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

Lab Sample ID: MB 880-35018/1-A

Matrix: Solid

Analysis Batch: 35120

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

Prep Batch: 35018

ı		IVID	IVID						
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
	Gasoline Range Organics	<50.0	U	50.0	mg/Kg		09/21/22 08:32	09/22/22 19:31	1
	(GRO)-C6-C10								
	Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		09/21/22 08:32	09/22/22 19:31	1
	C10-C28)								
	Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		09/21/22 08:32	09/22/22 19:31	1

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105		70 - 130	09/21/22 08:32	09/22/22 19:31	1
o-Terphenyl	103		70 - 130	09/21/22 08:32	09/22/22 19:31	1

Client: Ensolum Job ID: 890-3003-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

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

Lab Sample ID: LCS 880-35018/2-A

Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Total/NA Analysis Batch: 35120 Prep Batch: 35018

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	1066		mg/Kg		107	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	1068		mg/Kg		107	70 - 130	
C10-C28)								

LCS LCS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 113 o-Terphenyl 105 70 - 130

Lab Sample ID: LCSD 880-35018/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 35120** Prep Batch: 35018

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 821.3 Gasoline Range Organics mg/Kg 82 70 - 130 26 20 (GRO)-C6-C10 Diesel Range Organics (Over 1000 889.0 mg/Kg 89 70 - 130 18 20

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

86

C10-C28)

o-Terphenyl

Lab Sample ID: 880-19424-A-53-C MS Client Sample ID: Matrix Spike

70 - 130

Matrix: Solid Prep Type: Total/NA Analysis Batch: 35120 Prep Batch: 35018

	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 *1	996	826.0		mg/Kg		83	70 - 130	
Diesel Range Organics (Over C10-C28)	<49.9	U	996	868.7		mg/Kg		87	70 - 130	

MS MS %Recovery Qualifier Limits Surrogate 1-Chlorooctane 85 70 - 130 76 70 - 130 o-Terphenyl

Lab Sample ID: 880-19424-A-53-D MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid Prep Type: Total/NA **Analysis Batch: 35120** Prep Batch: 35018

	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 *1	999	786.3		mg/Kg		79	70 - 130	5	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	<49.9	U	999	872.5		mg/Kg		87	70 - 130	0	20	
C10-C28)												

Diesel Range Organics (Over C10-C28)	<49.9	U	999	872.5	mg/Kg	87	70 - 130	0	20
	MSD	MSD							
Surrogate	%Recovery	Qualifier	Limits						
1-Chlorooctane	82		70 - 130						

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Prep Type: Total/NA

Prep Batch: 35018

Prep Type: Soluble

Client Sample ID: Matrix Spike Duplicate

Client Sample ID: Method Blank

Client Sample ID: Matrix Spike

Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

Prep Type: Soluble

Job ID: 890-3003-1

Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

Lab Sample ID: 880-19424-A-53-D MSD **Matrix: Solid**

Analysis Batch: 35120

Surrogate %Recovery Qualifier Limits o-Terphenyl 70 - 130

MSD MSD

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-34935/1-A

Matrix: Solid

Analysis Batch: 35156

MB MB

Analyte Result Qualifier RL Unit D Dil Fac Prepared Analyzed 5.00 Chloride <5.00 09/22/22 17:40 U mg/Kg

Lab Sample ID: LCS 880-34935/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 35156

LCS LCS Spike %Rec Added Result Qualifier Analyte Unit %Rec Limits Chloride 250 249.7 mg/Kg 100 90 - 110

Lab Sample ID: LCSD 880-34935/3-A Client Sample ID: Lab Control Sample Dup **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 35156

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 250.1 90 - 110 mg/Kg 100

Lab Sample ID: 890-3000-A-3-C MS

Matrix: Solid

Analysis Batch: 35156

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	360		252	589 4		ma/Ka	_	91	90 - 110	

Lab Sample ID: 890-3000-A-3-D MSD

Matrix: Solid

Analysis Batch: 35156

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Qualifier Limits RPD Limit Result Unit %Rec Chloride 252 91 90 - 110 360 590.3 20 mg/Kg

QC Association Summary

Client: Ensolum Job ID: 890-3003-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

GC VOA

Prep Batch: 35620

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	5035	
890-3003-2	FS03	Total/NA	Solid	5035	
890-3003-3	FS04	Total/NA	Solid	5035	
890-3003-4	FS02	Total/NA	Solid	5035	
MB 880-35620/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35620/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35620/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-19424-A-41-E MS	Matrix Spike	Total/NA	Solid	5035	
880-19424-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Prep Batch: 35630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35630/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 35692

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-35692/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 35724

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-3	FS04	Total/NA	Solid	5035	
890-3003-5	FS05	Total/NA	Solid	5035	
MB 880-35724/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	5035	
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 35744

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	8021B	35620
890-3003-2	FS03	Total/NA	Solid	8021B	35620
890-3003-3	FS04	Total/NA	Solid	8021B	35620
890-3003-4	FS02	Total/NA	Solid	8021B	35620
MB 880-35620/5-A	Method Blank	Total/NA	Solid	8021B	35620
MB 880-35630/5-A	Method Blank	Total/NA	Solid	8021B	35630
LCS 880-35620/1-A	Lab Control Sample	Total/NA	Solid	8021B	35620
LCSD 880-35620/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35620
880-19424-A-41-E MS	Matrix Spike	Total/NA	Solid	8021B	35620
880-19424-A-41-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35620

Analysis Batch: 35878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	Total BTEX	
890-3003-2	FS03	Total/NA	Solid	Total BTEX	
890-3003-3	FS04	Total/NA	Solid	Total BTEX	
890-3003-4	FS02	Total/NA	Solid	Total BTEX	
890-3003-5	FS05	Total/NA	Solid	Total BTEX	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3003-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC VOA

Analysis Batch: 35890

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-3	FS04	Total/NA	Solid	8021B	35724
890-3003-5	FS05	Total/NA	Solid	8021B	35724
MB 880-35692/5-A	Method Blank	Total/NA	Solid	8021B	35692
MB 880-35724/5-A	Method Blank	Total/NA	Solid	8021B	35724
LCS 880-35724/1-A	Lab Control Sample	Total/NA	Solid	8021B	35724
LCSD 880-35724/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	35724
890-3015-A-1-E MS	Matrix Spike	Total/NA	Solid	8021B	35724
890-3015-A-1-F MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	35724

GC Semi VOA

Prep Batch: 35018

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	8015NM Prep	
890-3003-2	FS03	Total/NA	Solid	8015NM Prep	
890-3003-3	FS04	Total/NA	Solid	8015NM Prep	
890-3003-4	FS02	Total/NA	Solid	8015NM Prep	
890-3003-5	FS05	Total/NA	Solid	8015NM Prep	
MB 880-35018/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-35018/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-35018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
880-19424-A-53-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
880-19424-A-53-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 35120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	8015B NM	35018
890-3003-2	FS03	Total/NA	Solid	8015B NM	35018
890-3003-3	FS04	Total/NA	Solid	8015B NM	35018
890-3003-4	FS02	Total/NA	Solid	8015B NM	35018
890-3003-5	FS05	Total/NA	Solid	8015B NM	35018
MB 880-35018/1-A	Method Blank	Total/NA	Solid	8015B NM	35018
LCS 880-35018/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	35018
LCSD 880-35018/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	35018
880-19424-A-53-C MS	Matrix Spike	Total/NA	Solid	8015B NM	35018
880-19424-A-53-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	35018

Analysis Batch: 35297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Total/NA	Solid	8015 NM	
890-3003-2	FS03	Total/NA	Solid	8015 NM	
890-3003-3	FS04	Total/NA	Solid	8015 NM	
890-3003-4	FS02	Total/NA	Solid	8015 NM	
890-3003-5	FS05	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 34935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Soluble	Solid	DI Leach	
890-3003-2	FS03	Soluble	Solid	DI Leach	
890-3003-3	FS04	Soluble	Solid	DI Leach	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3003-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

HPLC/IC (Continued)

Leach Batch: 34935 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-4	FS02	Soluble	Solid	DI Leach	
890-3003-5	FS05	Soluble	Solid	DI Leach	
MB 880-34935/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-34935/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-34935/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3000-A-3-C MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3000-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 35156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3003-1	FS01	Soluble	Solid	300.0	34935
890-3003-2	FS03	Soluble	Solid	300.0	34935
890-3003-3	FS04	Soluble	Solid	300.0	34935
890-3003-4	FS02	Soluble	Solid	300.0	34935
890-3003-5	FS05	Soluble	Solid	300.0	34935
MB 880-34935/1-A	Method Blank	Soluble	Solid	300.0	34935
LCS 880-34935/2-A	Lab Control Sample	Soluble	Solid	300.0	34935
LCSD 880-34935/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	34935
890-3000-A-3-C MS	Matrix Spike	Soluble	Solid	300.0	34935
890-3000-A-3-D MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	34935

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14

Client: Ensolum

Project/Site: ADU 624/641

Job ID: 890-3003-1

SDG: 03E1558026/03E1558062

Lab Sample ID: 890-3003-1

Matrix: Solid

Client Sample ID: FS01 Date Collected: 09/19/22 10:40

Date Received: 09/19/22 15:28

	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	35620	09/28/22 14:52	EL	EET MID
Total/NA	Analysis	8021B		10	5 mL	5 mL	35744	10/01/22 14:25	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35878	10/01/22 19:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35297	09/23/22 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35018	09/21/22 08:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 02:18	SM	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	34935	09/21/22 10:00	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	35156	09/22/22 18:24	CH	EET MID

Client Sample ID: FS03

Date Collected: 09/19/22 10:45

Date Received: 09/19/22 15:28

Lab Sample ID: 890-3003-2

Matrix: Solid

Batch Dil Initial Final Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab 5035 5.04 g Total/NA Prep 5 mL 35620 09/28/22 14:52 EL EET MID 8021B Total/NA 5 mL 10/01/22 14:45 **EET MID** Analysis 10 5 mL 35744 MNR Total/NA Total BTEX 35878 10/01/22 19:44 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 35297 09/23/22 16:01 SM **EET MID** Total/NA 8015NM Prep 10.02 g 35018 09/21/22 08:32 Prep 10 mL DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 35120 09/23/22 02:40 SM **EET MID** Soluble 34935 09/21/22 10:00 KS EET MID Leach DI Leach 5.05 g 50 mL Soluble Analysis 300.0 5 50 mL 50 mL 35156 09/22/22 18:38 СН **EET MID**

Client Sample ID: FS04

Date Collected: 09/19/22 10:50

Date Received: 09/19/22 15:28

Lab Sample ID: 890-3	3003-3
----------------------	--------

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.01 g	5 mL	35724	09/29/22 16:18	MNR	EET MIC
Total/NA	Analysis	8021B		100	5 mL	5 mL	35890	10/03/22 18:13	AJ	EET MIC
Total/NA	Prep	5035			5.03 g	5 mL	35620	09/28/22 14:52	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	35744	10/01/22 15:26	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35878	10/01/22 19:44	AJ	EET MIC
Total/NA	Analysis	8015 NM		1			35297	09/23/22 16:01	SM	EET MIC
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	35018	09/21/22 08:32	DM	EET MIC
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 03:01	SM	EET MIC
Soluble	Leach	DI Leach			4.97 g	50 mL	34935	09/21/22 10:00	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	35156	09/22/22 18:43	CH	EET MID

Client: Ensolum

Project/Site: ADU 624/641

Job ID: 890-3003-1

SDG: 03E1558026/03E1558062

Lab Sample ID: 890-3003-4

Matrix: Solid

Client Sample ID: FS02 Date Collected: 09/19/22 14:35 Date Received: 09/19/22 15:28

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	35620	09/28/22 14:52	EL	EET MID
Total/NA	Analysis	8021B		25	5 mL	5 mL	35744	10/01/22 15:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			35878	10/01/22 19:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35297	09/23/22 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	35018	09/21/22 08:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 03:23	SM	EET MID
Soluble	Leach	DI Leach			4.95 g	50 mL	34935	09/21/22 10:00	KS	EET MID
Soluble	Analysis	300.0		10	50 mL	50 mL	35156	09/22/22 18:48	CH	EET MID

Client Sample ID: FS05 Lab Sample ID: 890-3003-5 Matrix: Solid

Date Collected: 09/19/22 14:40

Date Received: 09/19/22 15:28

	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	35724	09/29/22 16:18	MNR	EET MID
Total/NA	Analysis	8021B		100	5 mL	5 mL	35890	10/03/22 18:33	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			35878	10/01/22 19:44	AJ	EET MID
Total/NA	Analysis	8015 NM		1			35297	09/23/22 16:01	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	35018	09/21/22 08:32	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	35120	09/23/22 03:44	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	34935	09/21/22 10:00	KS	EET MID
Soluble	Analysis	300.0		5	50 mL	50 mL	35156	09/22/22 18:53	CH	EET MID

Laboratory References:

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

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3003-1 Project/Site: ADU 624/641

SDG: 03E1558026/03E1558062

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 the agency does not of	• •	t the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	

Method Summary

Client: Ensolum

Job ID: 890-3003-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

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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: ADU 624/641

Job ID: 890-3003-1

SDG: 03E1558026/03E1558062

3

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3003-1	FS01	Solid	09/19/22 10:40	09/19/22 15:28	6.5'
890-3003-2	FS03	Solid	09/19/22 10:45	09/19/22 15:28	6.5'
890-3003-3	FS04	Solid	09/19/22 10:50	09/19/22 15:28	6.5'
890-3003-4	FS02	Solid	09/19/22 14:35	09/19/22 15:28	5'
890-3003-5	ES05	Solid	09/19/22 14:40	09/19/22 15:28	5'

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Work Order No:

Midland, TX (432) 704-5440, San Antonio, TX (210) 509-3334

Environment Testing Xenco

💸 eurofins

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

EL Paso, TX (915) 585-3443, Lubbock, TX (806) 794-1296

10/3/2022

		Hobbs, NM (Hobbs, NM (575) 392-7550, Carlsbad, NM (575) 988-3199	www.xenco.com	Page of
Droject Manager:	Kare Jean poor	Bill to: (if different)	Garrett Green	Work Order Comments	mments
Company Name:	3	Company Name:	3102 E. Girecne St 9	T/PST ☐ PRP□	Brownfields ☐ RRC ☐ Superfund [
Address:	3122 Nat'l Parks Hour	Address:	XTo Energy		
City, State ZIP:	Carlsbad, NM 88220	City, State ZIP:	Carispact, NM 88220	evel Level	ST
Phone:	817 683 3503 Email:	-	Kjennings@enselum.com	Deliverables: EDD	1 U Other:
Osoloct Namo:		Turn Around	ANALYSIS REQUEST	ST	Preservative Codes
Project Number:	T Wood	Pres.			None: NO DI Water: H ₂ O
Project Location:	32, 533.18 -104, 3075 Due Date:	25			10
Sampler's Name:	Meredith Roberts TAT starts the lab. if	TAT starts the day received by the lab, if received by 4:30pm			HCL: HC HNO 3: HN H-SO 2: HN
CANADI E DECEIDT	Town Right. Kee No Wet Ire:	T			
SAMIPLE RECEIP 1	Ges No Thermometer	14	•		NaHSO 4: NABIS
Cooler Custody Seals:	Yes No MA	0	291		Na ₂ S ₂ O ₃ : NaSO 3
Sample Custody Seals:		N	890-3003 Chain of Custody	Custody	Zn Acetate+NaOH: Zn
Total Containers:	Corrected Temperature:	5.6	-		NaOH+Ascorbic Acid: SAPC
Sample Identification	ification Matrix Sampled Sampled	Depth Grab/ # of Comp	18 9T 140		Sample Comments
1000	S Guarry 1040	1 6 5 6 -	X X		Incident #5
2007	9/19/22	1	XXX		NAPP 2123634554
FX04	9/19112	6.5'	XXX		NAPP221544919
FSno			XXX		
TACAR.	C 91/19/27		××		Cost Center(s):
3		-			1136151001
					1136141001
Total 200.7 / 6010	8RCR.	8RCRA 13PPM Texas 11 Al SI	A 13PPM Texas 11 Al Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni K	Vi K Se Ag SiO ₂ Na Sr Hq: 1631 / 245.1	TI Sn U V Zn 77470 /7471
CITCIE METDOU(S) Notice: Signature of this doc of caroline Fundins Xenco w	LITCLE (METROD(S) and INTELLATES) TO DE antalyzed bottes. Signature of this document and relinquishment of samples constitutes a valid purchas frequent fronters. Signature of this document and relinquishment of samples and shall not assume any frequent.	order from client company to Euresponsibility for any losses or expe	CITCLE INTERTOOL(S) and INTERTOLS), TO be attracted to the property of the cost of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions for each order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions for each order from client company to Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses on expenses incurred by the client if such losses are due to circumstances beyond the control		
of Eurofins Xenco. A minim	um charge of \$85.00 will be applied to each project and a charge	if \$5 for each sample submitted to	of Eurofins Xerxo. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xerxo. A minimum charge of \$85.00 will be enforced unless previously negotiated	previously negotiated.	
Relinquished by: (Signature)	r. (Signature) Received by (Signature)	ture)	Date/Time Relinquished by: (Signature)	re) Received by: (Signature)) Date/Time
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1		hand			

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3003-1

SDG Number: 03E1558026/03E1558062

Login Number: 3003 List Source: Eurofins Carlsbad

List Number: 1 Creator: Stutzman, Amanda

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

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3003-1

SDC Number: 0351559036 (0351559036)

SDG Number: 03E1558026/03E1558062

List Source: Eurofins Midland
List Number: 2 List Creation: 09/21/22 11:23 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: 890-3148-1

Laboratory Sample Delivery Group: 03E1558026, 03E1558062

Client Project/Site: ADU 624 & 641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/13/2022 10:49:20 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: ADU 624 & 641 Laboratory Job ID: 890-3148-1 SDG: 03E1558026, 03E1558062

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Definitions/Glossary

Job ID: 890-3148-1 Client: Ensolum Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

Qualifiers

GC VOA

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

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

*1 LCS/LCSD RPD exceeds control limits.

Percent Recovery

S1-Surrogate recovery exceeds control limits, low biased. 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

%R

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

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL **Practical Quantitation Limit**

Presumptive **PRES** QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: ADU 624 & 641

Job ID: 890-3148-1

SDG: 03E1558026, 03E1558062

Job ID: 890-3148-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3148-1

Receipt

The samples were received on 10/5/2022 9:10 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 1.6°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS08A (890-3148-1), FS09A (890-3148-2), SW09 (890-3148-3), SW10 (890-3148-4), PH05 (890-3148-5) and PH05A (890-3148-6).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The surrogate recovery for the blank associated with preparation batch 880-36387 and analytical batch 880-36315 was outside the upper control limits.

Method 8015MOD NM: The RPD of the laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) for preparation batch 880-36387 and analytical batch 880-36315 recovered outside control limits for the following analytes: Gasoline Range Organics (GRO)-C6-C10.

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

HPLC/IC

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-36287 and analytical batch 880-36379 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory sample control duplicate (LCS/LCSD) precision was within acceptance limits.

Method 300 ORGFM 28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-36242 and analytical batch 880-36598 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.

Client Sample Results

Client: Ensolum Job ID: 890-3148-1 SDG: 03E1558026, 03E1558062

Project/Site: ADU 624 & 641

Client Sample ID: FS08A Lab Sample ID: 890-3148-1 Date Collected: 10/04/22 09:45 Date Received: 10/05/22 09:10

Sample Depth: 7'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00201	U	0.00201	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
Toluene	<0.00201	U	0.00201	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
Ethylbenzene	<0.00201	U	0.00201	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
m-Xylene & p-Xylene	<0.00402	U	0.00402	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
o-Xylene	<0.00201	U	0.00201	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
Xylenes, Total	<0.00402	U	0.00402	mg/Kg		10/10/22 13:52	10/13/22 00:47	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			10/10/22 13:52	10/13/22 00:47	1
1,4-Difluorobenzene (Surr)	97		70 - 130			10/10/22 13:52	10/13/22 00:47	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00402	U	0.00402	mg/Kg			10/13/22 11:29	1
Method: SW846 8015 NM - Diese Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
	•	Qualifier	•	Unit mg/Kg	D	Prepared	Analyzed 10/10/22 12:14	
Analyte	Result 11.8	Qualifier	50.0		<u>D</u>	Prepared		
Analyte Total TPH	Result 11.8 sel Range Orga	Qualifier	50.0		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies	Result 11.8 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 50.0	mg/Kg	=		10/10/22 12:14	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result 11.8 sel Range Orga Result	Qualifier nics (DRO) Qualifier U*1	RL 50.0	mg/Kg	=	Prepared	10/10/22 12:14 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 11.8 sel Range Orga Result <50.0	Qualifier nics (DRO) Qualifier U*1	RL	mg/Kg Unit mg/Kg	=	Prepared 10/07/22 13:17	10/10/22 12:14 Analyzed 10/07/22 21:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 11.8 sel Range Orga Result <50.0 11.8	Qualifier nics (DRO) Qualifier U*1	RL 50.0 (GC) RL 50.0	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 13:17 10/07/22 13:17	10/10/22 12:14 Analyzed 10/07/22 21:36 10/07/22 21:36	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 11.8	Qualifier nics (DRO) Qualifier U*1	RL 50.0 (GC) RL 50.0 50.0	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/07/22 21:36 10/07/22 21:36 10/07/22 21:36	Dil Face 1 1 1 Dil Face
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result 11.8	Qualifier nics (DRO) Qualifier U*1	RL	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 13:17 10/07/22 13:17 10/07/22 13:17 Prepared	Analyzed 10/07/22 21:36 10/07/22 21:36 10/07/22 21:36 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result 11.8	Qualifier nics (DRO) Qualifier U*1 U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 13:17 10/07/22 13:17 10/07/22 13:17 Prepared 10/07/22 13:17	Analyzed 10/07/22 21:36 10/07/22 21:36 10/07/22 21:36 Analyzed 10/07/22 21:36	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result 11.8	Qualifier nics (DRO) Qualifier U*1 U Qualifier	RL 50.0 (GC) RL 50.0 50.0 50.0 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 13:17 10/07/22 13:17 10/07/22 13:17 Prepared 10/07/22 13:17	Analyzed 10/07/22 21:36 10/07/22 21:36 10/07/22 21:36 Analyzed 10/07/22 21:36	

Client Sample ID: FS09A Lab Sample ID: 890-3148-2

Date Collected: 10/04/22 10:10 Date Received: 10/05/22 09:10

Sample Depth: 7.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00202	U	0.00202	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
Toluene	<0.00202	U	0.00202	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
Ethylbenzene	<0.00202	U	0.00202	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
m-Xylene & p-Xylene	<0.00403	U	0.00403	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
o-Xylene	<0.00202	U	0.00202	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
Xylenes, Total	<0.00403	U	0.00403	mg/Kg		10/10/22 13:52	10/13/22 01:07	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/10/22 13:52	10/13/22 01:07	1

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Matrix: Solid

Client: Ensolum

Job ID: 890-3148-1

Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

Client Sample ID: FS09A Lab Sample ID: 890-3148-2

Date Collected: 10/04/22 10:10 Matrix: Solid Date Received: 10/05/22 09:10

Sample Depth: 7.5'

Method: SW846 8021B - Vo	/olatile Organic Compounds	(GC) (Continued)
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Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1 4-Difluorobenzene (Surr)	100	70 - 130	10/10/22 13:52	10/13/22 01:07	

Method: TAL SOP To	tal RTEY - Total I	RTEY Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00403 U	0.00403	ma/Ka			10/13/22 11:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Total TPH	53.9		50.0	ma/Ka			10/10/22 12:14	1	

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

		(=)	()					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	50.0	mg/Kg		10/07/22 13:17	10/07/22 22:41	1
Diesel Range Organics (Over C10-C28)	53.9		50.0	mg/Kg		10/07/22 13:17	10/07/22 22:41	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 13:17	10/07/22 22:41	1
Surrogate	%Recovery	Qualifier	l imite			Propared	Analyzod	Dil Eac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	98	70 - 130	10/07/22 13:17	10/07/22 22:41	1
o-Terphenyl	104	70 - 130	10/07/22 13:17	10/07/22 22:41	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3330		25.0	mg/Kg			10/11/22 10:39	5

Client Sample ID: SW09 Lab Sample ID: 890-3148-3

Date Collected: 10/04/22 10:40 Date Received: 10/05/22 09:10

Sample Depth: 2'-4'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/10/22 13:52	10/13/22 01:28	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			10/10/22 13:52	10/13/22 01:28	1
4.4.000			70 100			10/10/00 10 50	10/10/00 01 00	

Surrogate	%Recovery	Qualifier	Limits	Prepared	Anaiyzea	DII Fac
4-Bromofluorobenzene (Surr)	110		70 - 130	10/10/22 13:52	10/13/22 01:28	1
1,4-Difluorobenzene (Surr)	80		70 - 130	10/10/22 13:52	10/13/22 01:28	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	< 0.00399	U	0.00399	mg/Kg			10/13/22 11:29	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/10/22 12:14	1

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Matrix: Solid

Client: Ensolum

Job ID: 890-3148-1 Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

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Date Coll Date Received: 10/05/22 09:10

Sample Depth: 2'-4'

ent Sample ID: SW09	Lab Sample ID: 890-3148-3
e Collected: 10/04/22 10:40	Matrix: Solid

Analyzed

10/11/22 10:47

Prepared

D

Method: SW846 8015B NM - Diesel Range Organics (DRO) (GC) Result Qualifier Analyte RL Unit Dil Fac D Prepared Analyzed <50.0 U *1 50.0 10/07/22 13:17 10/07/22 23:03 Gasoline Range Organics mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over 50.0 10/07/22 13:17 10/07/22 23:03 <50.0 U mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 10/07/22 13:17 10/07/22 23:03 %Recovery Qualifier Limits Prepared Analyzed Dil Fac Surrogate 1-Chlorooctane 70 - 130 10/07/22 13:17 10/07/22 23:03 76 o-Terphenyl 84 70 - 130 10/07/22 13:17 10/07/22 23:03 Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

4.97 **Client Sample ID: SW10** Lab Sample ID: 890-3148-4 Matrix: Solid

RL

Unit

mg/Kg

Result Qualifier

222

Date Collected: 10/04/22 13:25 Date Received: 10/05/22 09:10

Sample Depth: 2'-4'

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
Toluene	< 0.00199	U	0.00199	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/10/22 13:52	10/13/22 01:48	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	95		70 - 130			10/10/22 13:52	10/13/22 01:48	1
1,4-Difluorobenzene (Surr)	97		70 - 130			10/10/22 13:52	10/13/22 01:48	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			10/13/22 11:29	1
Total BTEX Method: SW846 8015 NM - Diese				mg/Kg			10/13/22 11:29	1
- -	l Range Organ			mg/Kg Unit	D	Prepared	10/13/22 11:29 Analyzed	1 Dil Fac
: Method: SW846 8015 NM - Diese	l Range Organ	ics (DRO) (GC)		<u>D</u>	Prepared		
Method: SW846 8015 NM - Diese Analyte	Range Organ Result <49.9	ics (DRO) (Gualifier	GC) RL 49.9	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Range Organ Result <49.9 sel Range Organ	ics (DRO) (Gualifier	GC) RL 49.9	Unit	<u>D</u>	Prepared Prepared	Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	Range Organ Result <49.9 sel Range Orga Result	Qualifier U	RL 49.9 (GC)	Unit mg/Kg			Analyzed 10/10/22 12:14	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Range Organ Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U vica (DRO) Qualifier U *1	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg		Prepared 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:24	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Range Organ Result <49.9 sel Range Orga Result	Qualifier U nics (DRO) Qualifier U vica (DRO) Qualifier U *1	(GC) RL 49.9	Unit mg/Kg		Prepared	Analyzed 10/10/22 12:14 Analyzed	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result Sel Range Organ Result <49.9 Sel Range Organ Result <49.9	cos (DRO) (Qualifier U nics (DRO) Qualifier U *1	GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:24 10/07/22 23:24	Dil Fac Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Range Organ Result <49.9 sel Range Orga Result <49.9	cos (DRO) (Qualifier U nics (DRO) Qualifier U *1	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:24	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result Sel Range Organ Result <49.9 Sel Range Organ Result <49.9	cos (DRO) (Qualifier U nics (DRO) Qualifier U *1 U	GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:24 10/07/22 23:24	Dil Fac Dil Fac 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	sel Range Organ Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9	cos (DRO) (Control of the control of	GC) RL 49.9 (GC) RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:24 10/07/22 23:24	Dil Fac Dil Fac 1 1 1

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Dil Fac

Client Sample Results

Client: Ensolum Job ID: 890-3148-1 Project/Site: ADU 624 & 641

SDG: 03E1558026, 03E1558062 **Client Sample ID: SW10** Lab Sample ID: 890-3148-4

Date Collected: 10/04/22 13:25 Date Received: 10/05/22 09:10

Sample Depth: 2'-4'

Method: MCAWW 300.0 - Anions,	Ion Chromatography - So	luble					
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	149	5.02	mg/Kg			10/11/22 10:54	1

Client Sample ID: PH05 Lab Sample ID: 890-3148-5 **Matrix: Solid**

Date Collected: 10/04/22 14:40 Date Received: 10/05/22 09:10

Method: SW846 8021B - Volatile Analyte	•	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Benzene	1.90		0.501	 mg/Kg		10/10/22 13:52	10/13/22 02:29	25
Toluene	26.5		0.501	mg/Kg		10/10/22 13:52	10/13/22 02:29	25
Ethylbenzene	14.8		0.501	mg/Kg		10/10/22 13:52	10/13/22 02:29	25
m-Xylene & p-Xylene	35.5		1.00	mg/Kg		10/10/22 13:52	10/13/22 02:29	250
o-Xylene	15.0		0.501	mg/Kg		10/10/22 13:52	10/13/22 02:29	250
Xylenes, Total	50.5		1.00	mg/Kg		10/10/22 13:52	10/13/22 02:29	25
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fa
4-Bromofluorobenzene (Surr)	126		70 - 130			10/10/22 13:52	10/13/22 02:29	250
1,4-Difluorobenzene (Surr)	113		70 - 130			10/10/22 13:52	10/13/22 02:29	25
Method: TAL SOP Total BTEX -	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Total BTEX	93.7		1.00	mg/Kg			10/13/22 11:29	
Analyte Total TPH	Result 5900	Qualifier	RL 249	<mark>Unit</mark> mg/Kg	D	Prepared	Analyzed 10/10/22 12:14	Dil Fa
	5900		249	mg/Kg			10/10/22 12:14	
Method: SW846 8015B NM - Die			• •					
Analyte		Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fa
Gasoline Range Organics	2300	*1	249	mg/Kg		10/07/22 13:17	10/08/22 02:16	
(GRO)-C6-C10								
Diesel Range Organics (Over	3240		249	mg/Kg		10/07/22 13:17	10/08/22 02:16	ţ
Diesel Range Organics (Over C10-C28)	3240 361		249 249	mg/Kg mg/Kg		10/07/22 13:17 10/07/22 13:17	10/08/22 02:16 10/08/22 02:16	
Diesel Range Organics (Over C10-C28)		Qualifier						Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	361	Qualifier	249			10/07/22 13:17	10/08/22 02:16	!
(GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	361 %Recovery	Qualifier	249			10/07/22 13:17 Prepared	10/08/22 02:16 Analyzed	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl Method: MCAWW 300.0 - Anions	361 **Recovery 96 91 s, lon Chromato	ography - So	249 Limits 70 - 130 70 - 130	mg/Kg		10/07/22 13:17 Prepared 10/07/22 13:17 10/07/22 13:17	10/08/22 02:16 Analyzed 10/08/22 02:16 10/08/22 02:16	Dil Fa
Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	361 **Recovery 96 91 s, lon Chromato	·	249 Limits 70 - 130 70 - 130		<u>D</u>	10/07/22 13:17 Prepared 10/07/22 13:17	10/08/22 02:16 Analyzed 10/08/22 02:16	Dil Fa

Lab Sample ID: 890-3148-6

Client Sample Results

 Client: Ensolum
 Job ID: 890-3148-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026, 03E1558062

Client Sample ID: PH05A

Date Collected: 10/04/22 15:10 Date Received: 10/05/22 09:10

Sample Depth: 16'

Analyte

Chloride

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		10/10/22 13:52	10/13/22 02:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	96		70 - 130			10/10/22 13:52	10/13/22 02:08	1
1,4-Difluorobenzene (Surr)	92		70 - 130			10/10/22 13:52	10/13/22 02:08	1
Method: TAL SOP Total BTEX - T	otal BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			10/13/22 11:29	1
	l Panga Organ	ice (DRO) ((
Method: SW846 8015 NM - Diese			GC)		n	Prenared		Dil Fac
		Qualifier		Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/10/22 12:14	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9	Unit	<u>D</u>	Prepared	Analyzed	
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9	Qualifier U	RL 49.9 (GC)	Unit mg/Kg			Analyzed 10/10/22 12:14	1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Dies Analyte	Result <49.9 sel Range Orga Result	Qualifier U unics (DRO) Qualifier	(GC) RL RL	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 10/10/22 12:14 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Result <49.9	Qualifier U unics (DRO) Qualifier	RL 49.9 (GC)	Unit mg/Kg			Analyzed 10/10/22 12:14	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10	Result <49.9 sel Range Orga Result <49.9	Qualifier U unics (DRO) Qualifier U *1	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:46	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics	Result <49.9 sel Range Orga Result	Qualifier U unics (DRO) Qualifier U *1	(GC) RL RL	Unit mg/Kg		Prepared	Analyzed 10/10/22 12:14 Analyzed	1 Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result <49.9	Qualifier U unics (DRO) Qualifier U *1	(GC) RL 49.9 (GC) RL 49.9	Unit mg/Kg Unit mg/Kg		Prepared 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:46	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U unics (DRO) Qualifier U *1 U	(GC) RL 49.9 (GC) RL 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:46 10/07/22 23:46	Dil Fac
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9	Qualifier U unics (DRO) Qualifier U *1 U	GC) RL 49.9 (GC) RL 49.9 49.9 49.9	Unit mg/Kg Unit mg/Kg mg/Kg		Prepared 10/07/22 13:17 10/07/22 13:17	Analyzed 10/10/22 12:14 Analyzed 10/07/22 23:46 10/07/22 23:46	1 Dil Fac

RL

4.95

Unit

mg/Kg

D

Prepared

Result Qualifier

74.1 F1

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-

3

5

Q

10

12

13

Dil Fac

Analyzed

10/07/22 12:39

Surrogate Summary

Client: Ensolum Job ID: 890-3148-1 Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

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)	
890-3144-A-1-D MS	Matrix Spike	117	97	
890-3144-A-1-E MSD	Matrix Spike Duplicate	85	95	
890-3148-1	FS08A	96	97	
890-3148-2	FS09A	100	100	
890-3148-3	SW09	110	80	
890-3148-4	SW10	95	97	
890-3148-5	PH05	126	113	
890-3148-6	PH05A	96	92	
LCS 880-36591/1-A	Lab Control Sample	96	104	
LCSD 880-36591/2-A	Lab Control Sample Dup	96	100	
MB 880-36589/5-A	Method Blank	90	94	
MB 880-36591/5-A	Method Blank	88	94	

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

				Percent Surrogate Rec
		1001	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3148-1	FS08A	79	88	
890-3148-1 MS	FS08A	94	92	
890-3148-1 MSD	FS08A	91	92	
890-3148-2	FS09A	98	104	
890-3148-3	SW09	76	84	
890-3148-4	SW10	79	89	
890-3148-5	PH05	96	91	
890-3148-6	PH05A	97	102	
LCS 880-36387/2-A	Lab Control Sample	110	119	
LCSD 880-36387/3-A	Lab Control Sample Dup	95	108	
MB 880-36387/1-A	Method Blank	7 S1-	7 S1-	
Surrogate Legend				

1CO = 1-Chlorooctane OTPH = o-Terphenyl

QC Sample Results

Client: Ensolum Job ID: 890-3148-1 SDG: 03E1558026, 03E1558062 Project/Site: ADU 624 & 641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-36589/5-A

Matrix: Solid Analysis Batch: 36716 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36589

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:30	10/12/22 11:31	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:30	10/12/22 11:31	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:30	10/12/22 11:31	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/10/22 13:30	10/12/22 11:31	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 13:30	10/12/22 11:31	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/10/22 13:30	10/12/22 11:31	1

MB MB

MR MR

Surrogate	%Recovery	Qualifier	Limits	Prep	ared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	90		70 - 130	10/10/2	22 13:30	10/12/22 11:31	1
1,4-Difluorobenzene (Surr)	94		70 - 130	10/10/2	2 13:30	10/12/22 11:31	1

Lab Sample ID: MB 880-36591/5-A Client Sample ID: Method Blank **Matrix: Solid**

Analysis Batch: 36716

Prep Type: Total/NA

Prep Batch: 36591

Analyte Result Qualifier RL Unit Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 10/10/22 13:52 10/12/22 23:04 Toluene <0.00200 U 0.00200 mg/Kg 10/10/22 13:52 10/12/22 23:04 Ethylbenzene <0.00200 U 0.00200 mg/Kg 10/10/22 13:52 10/12/22 23:04 10/10/22 13:52 10/12/22 23:04 m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg <0.00200 U 10/12/22 23:04 o-Xylene 0.00200 mg/Kg 10/10/22 13:52 Xylenes, Total <0.00400 U 0.00400 mg/Kg 10/10/22 13:52 10/12/22 23:04

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	88		70 - 130	10/10/22 13:52	10/12/22 23:04	1
1,4-Difluorobenzene (Surr)	94		70 - 130	10/10/22 13:52	10/12/22 23:04	1

Lab Sample ID: LCS 880-36591/1-A

Matrix: Solid

Analysis Batch: 36716

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

Prep Batch: 36591

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1109		mg/Kg		111	70 - 130	
Toluene	0.100	0.09785		mg/Kg		98	70 - 130	
Ethylbenzene	0.100	0.09422		mg/Kg		94	70 - 130	
m-Xylene & p-Xylene	0.200	0.1941		mg/Kg		97	70 - 130	
o-Xylene	0.100	0.1122		mg/Kg		112	70 - 130	

LCS LCS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	96	70 - 130
1.4-Difluorobenzene (Surr)	104	70 - 130

Lab Sample ID: LCSD 880-36591/2-A

Matrix: Solid

Analysis Batch: 36716

Client Sample ID: L	ab Control Sample Dup
	Dren Times Tetal/NA

Prep Type: Total/NA

Prep Batch: 36591

	Spike	LCSD LCSD				%Rec		RPD
Analyte	Added	Result Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09337	mg/Kg		93	70 - 130	17	35

QC Sample Results

Job ID: 890-3148-1 Client: Ensolum Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

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

Lab Sample ID: LCSD 880-36591/2-A **Matrix: Solid**

Analysis Batch: 36716

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA Prep Batch: 36591

Spike LCSD LCSD %Rec **RPD** Analyte Added Result Qualifier Unit %Rec Limits **RPD** Limit D Toluene 0.100 0.08557 86 70 - 130 35 mg/Kg 13 Ethylbenzene 0.100 0.08075 mg/Kg 81 70 - 130 15 35 0.200 m-Xylene & p-Xylene 0.1627 mg/Kg 81 70 130 35 18 o-Xylene 0.100 0.09260 mg/Kg 93 70 - 130 19 35

LCSD LCSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	96		70 - 130
1,4-Difluorobenzene (Surr)	100		70 - 130

Lab Sample ID: 890-3144-A-1-D MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 36716

Prep Type: Total/NA

Prep Batch: 36591

MS MS %Rec Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Benzene 0.07974 <0.00201 U F2 F1 0.100 mg/Kg 79 70 - 130 Toluene <0.00201 UF1 0.100 0.08047 80 70 - 130 mg/Kg Ethylbenzene 0.100 0.08454 70 - 130 < 0.00201 UF1 mg/Kg 84 m-Xylene & p-Xylene <0.00402 U F1 0.201 0.1817 91 70 - 130 mg/Kg o-Xylene <0.00201 UF1 0.100 0.1046 mg/Kg 104 70 - 130

MS MS

Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	117	70 - 130
1,4-Difluorobenzene (Surr)	97	70 - 130

Lab Sample ID: 890-3144-A-1-E MSD Client Sample ID: Matrix Spike Duplicate

MSD MSD

<0.00198 U F2 F1

<0.00198 UF1

<0.00198 UF1

<0.00396 UF1

<0.00198 UF1

Result Qualifier

Unit

mg/Kg

mg/Kg

mg/Kg

mg/Kg

mg/Kg

Spike

Added

0.0990

0.0990

0.0990

0.198

0.0990

Matrix: Solid

Analyte

Benzene

Toluene

o-Xylene

Ethylbenzene

m-Xylene & p-Xylene

Analysis Batch: 36716

Prep Type: Total/NA Prep Batch: 36591

%Rec

70 - 130

%Rec Limits RPD Limit 0.4 70 - 130 198 35 0 70 - 130 NC 35 0 70 - 130 NC 35 0 70 - 130 NC 35

NC

MSD MSD

Sample Sample

<0.00201

<0.00201

< 0.00201

<0.00402 UF1

<0.00201 UF1

Result Qualifier

U F2 F1

UF1

UF1

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	85		70 - 130
1,4-Difluorobenzene (Surr)	95		70 - 130

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

Lab Sample ID: MB 880-36387/1-A

Matrix: Solid

Analysis Batch: 36315

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

Prep Batch: 36387

MB MB Analyte Result Qualifier RL Unit Prepared <50.0 U 50.0 mg/Kg 10/07/22 13:17 10/07/22 19:44 Gasoline Range Organics

(GRO)-C6-C10

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RPD

35

Job ID: 890-3148-1 Client: Ensolum SDG: 03E1558026, 03E1558062 Project/Site: ADU 624 & 641

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

Lab Sample ID: MB 880-36387/1-A **Matrix: Solid**

Lab Sample ID: LCS 880-36387/2-A

Analysis Batch: 36315

MB MB

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 36387

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/07/22 13:17	10/07/22 19:44	1
C10-C28)								
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 13:17	10/07/22 19:44	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	7	S1-	70 - 130	10/07/22 13:17	10/07/22 19:44	1
o-Terphenyl	7	S1-	70 - 130	10/07/22 13:17	10/07/22 19:44	1

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 36387

Analysis Batch: 36315 LCS LCS Spike Analyte Added Result Qualifier Unit %Rec Limits Gasoline Range Organics 1000 1166 mg/Kg 117 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over 1000 1038 104 mg/Kg 70 - 130

C10-C28)

Matrix: Solid

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	110		70 - 130
o-Terphenyl	119		70 - 130

Lab Sample ID: LCSD 880-36387/3-A

Matrix: Solid

Analysis Batch: 36315

Prep Type: Total/NA

Prep Batch: 36387

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics	1000	913.9	*1	mg/Kg		91	70 - 130	24	20
(GRO)-C6-C10 Diesel Range Organics (Over	1000	907.1		mg/Kg		91	70 - 130	13	20
C10-C28)	1000	307.1		mg/rtg		31	70 - 100	10	20

	LCSD	LCSD	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	95		70 - 130
o-Terphenyl	108		70 - 130

Lab Sample ID: 890-3148-1 MS

Matrix: Solid

Analysis Batch: 36315

Client Sample ID: FS08A

Prep Type: Total/NA

Prep Batch: 36387

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics (GRO)-C6-C10	<50.0	U *1	998	824.5		mg/Kg		80	70 - 130	
Diesel Range Organics (Over	118		998	928.0		mg/Kg		81	70 - 130	

C10-C28)

	IVIS	IVIS	
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	94		70 - 130
o-Terphenyl	92		70 - 130

Client: Ensolum Job ID: 890-3148-1 Project/Site: ADU 624 & 641

SDG: 03E1558026, 03E1558062

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

Lab Sample ID: 890-3148-1 MSD Client Sample ID: FS08A **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 36315

Prep Batch: 36387

	Sample	Sample	Spike	MSD	MSD				%Rec		RPD	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Gasoline Range Organics	<50.0	U *1	999	796.9		mg/Kg		77	70 - 130	3	20	
(GRO)-C6-C10												
Diesel Range Organics (Over	118		999	917.1		mg/Kg		80	70 - 130	1	20	
040,000)												

C10-C28)

MSD MSD %Recovery Qualifier Limits Surrogate 1-Chlorooctane 70 - 130 91 o-Terphenyl 92 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36287/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Soluble

Analysis Batch: 36379

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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<5.00	U	5.00	mg/Kg			10/07/22 10:29	1

Lab Sample ID: LCS 880-36287/2-A **Client Sample ID: Lab Control Sample Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36379

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	250	225.7	-	mg/Kg		90	90 - 110	

Lab Sample ID: LCSD 880-36287/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36379

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	230.8		mg/Kg		92	90 - 110	2	20	

Lab Sample ID: 890-3148-6 MS Client Sample ID: PH05A **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36379

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Chloride	741	F1	248	910.0	F1	ma/Ka		68	90 110	

Lab Sample ID: 890-3148-6 MSD Client Sample ID: PH05A Matrix: Solid **Prep Type: Soluble**

Analysis Batch: 36379

Sample Sample Spike MSD MSD %Rec RPD Result Qualifier Added Result Qualifier Limit Analyte %Rec Limits RPD Unit 741 F1 248 976.3 Chloride 90 - 110 mg/Kg

QC Sample Results

Client: Ensolum Job ID: 890-3148-1 Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

Client Sample ID: Method Blank

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 880-36242/1-A

Matrix: Solid

Analysis Batch: 36598

Prep Type: Soluble MB MB

Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Chloride <5.00 U 5.00 mg/Kg 10/11/22 07:11

Lab Sample ID: LCS 880-36242/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36598

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 260.6 mg/Kg 104 90 - 110

Lab Sample ID: LCSD 880-36242/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36598

LCSD LCSD RPD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 260.8 mg/Kg 104 90 - 110

Lab Sample ID: 890-3147-A-4-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36598

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Chloride 8500 F1 5000 18090 F1 192 90 - 110 mg/Kg

Lab Sample ID: 890-3147-A-4-C MSD Client Sample ID: Matrix Spike Duplicate **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 36598

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 8500 F1 5000 17000 F1 Chloride mg/Kg 170 90 - 110 6 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3148-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026, 03E1558062

GC VOA

Prep Batch: 36589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 880-36589/5-A	Method Blank	Total/NA	Solid	5035	

Prep Batch: 36591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Total/NA	Solid	5035	
890-3148-2	FS09A	Total/NA	Solid	5035	
890-3148-3	SW09	Total/NA	Solid	5035	
890-3148-4	SW10	Total/NA	Solid	5035	
890-3148-5	PH05	Total/NA	Solid	5035	
890-3148-6	PH05A	Total/NA	Solid	5035	
MB 880-36591/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36591/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36591/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
890-3144-A-1-D MS	Matrix Spike	Total/NA	Solid	5035	
890-3144-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 36716

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Total/NA	Solid	8021B	36591
890-3148-2	FS09A	Total/NA	Solid	8021B	36591
890-3148-3	SW09	Total/NA	Solid	8021B	36591
890-3148-4	SW10	Total/NA	Solid	8021B	36591
890-3148-5	PH05	Total/NA	Solid	8021B	36591
890-3148-6	PH05A	Total/NA	Solid	8021B	36591
MB 880-36589/5-A	Method Blank	Total/NA	Solid	8021B	36589
MB 880-36591/5-A	Method Blank	Total/NA	Solid	8021B	36591
LCS 880-36591/1-A	Lab Control Sample	Total/NA	Solid	8021B	36591
LCSD 880-36591/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36591
890-3144-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	36591
890-3144-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	36591

Analysis Batch: 36861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Total/NA	Solid	Total BTEX	
890-3148-2	FS09A	Total/NA	Solid	Total BTEX	
890-3148-3	SW09	Total/NA	Solid	Total BTEX	
890-3148-4	SW10	Total/NA	Solid	Total BTEX	
890-3148-5	PH05	Total/NA	Solid	Total BTEX	
890-3148-6	PH05A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 36315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Total/NA	Solid	8015B NM	36387
890-3148-2	FS09A	Total/NA	Solid	8015B NM	36387
890-3148-3	SW09	Total/NA	Solid	8015B NM	36387
890-3148-4	SW10	Total/NA	Solid	8015B NM	36387
890-3148-5	PH05	Total/NA	Solid	8015B NM	36387
890-3148-6	PH05A	Total/NA	Solid	8015B NM	36387
MB 880-36387/1-A	Method Blank	Total/NA	Solid	8015B NM	36387

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QC Association Summary

Client: Ensolum Job ID: 890-3148-1 Project/Site: ADU 624 & 641 SDG: 03E1558026, 03E1558062

GC Semi VOA (Continued)

Analysis Batch: 36315 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 880-36387/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36387
LCSD 880-36387/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36387
890-3148-1 MS	FS08A	Total/NA	Solid	8015B NM	36387
890-3148-1 MSD	FS08A	Total/NA	Solid	8015B NM	36387

Prep Batch: 36387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Total/NA	Solid	8015NM Prep	
890-3148-2	FS09A	Total/NA	Solid	8015NM Prep	
890-3148-3	SW09	Total/NA	Solid	8015NM Prep	
890-3148-4	SW10	Total/NA	Solid	8015NM Prep	
890-3148-5	PH05	Total/NA	Solid	8015NM Prep	
890-3148-6	PH05A	Total/NA	Solid	8015NM Prep	
MB 880-36387/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36387/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36387/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3148-1 MS	FS08A	Total/NA	Solid	8015NM Prep	
890-3148-1 MSD	FS08A	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36584

Lab Sample ID 890-3148-1	Client Sample ID	Prep Type Total/NA	Matrix	Method 8015 NM	Prep Batch
	FS08A		Solid		
890-3148-2	FS09A	Total/NA	Solid	8015 NM	
890-3148-3	SW09	Total/NA	Solid	8015 NM	
890-3148-4	SW10	Total/NA	Solid	8015 NM	
890-3148-5	PH05	Total/NA	Solid	8015 NM	
890-3148-6	PH05A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 36242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batcl
890-3148-1	FS08A	Soluble	Solid	DI Leach	
890-3148-2	FS09A	Soluble	Solid	DI Leach	
890-3148-3	SW09	Soluble	Solid	DI Leach	
890-3148-4	SW10	Soluble	Solid	DI Leach	
890-3148-5	PH05	Soluble	Solid	DI Leach	
MB 880-36242/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36242/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36242/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3147-A-4-B MS	Matrix Spike	Soluble	Solid	DI Leach	
890-3147-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Leach Batch: 36287

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-6	PH05A	Soluble	Solid	DI Leach	
MB 880-36287/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36287/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36287/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3148-6 MS	PH05A	Soluble	Solid	DI Leach	
890-3148-6 MSD	PH05A	Soluble	Solid	DI Leach	

QC Association Summary

 Client: Ensolum
 Job ID: 890-3148-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026, 03E1558062

HPLC/IC

Analysis Batch: 36379

Lab Sample ID 890-3148-6	Client Sample ID PH05A	Prep Type Soluble	Matrix Solid	Method 300.0	Prep Batch 36287
MB 880-36287/1-A	Method Blank	Soluble	Solid	300.0	36287
LCS 880-36287/2-A	Lab Control Sample	Soluble	Solid	300.0	36287
LCSD 880-36287/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36287
890-3148-6 MS	PH05A	Soluble	Solid	300.0	36287
890-3148-6 MSD	PH05A	Soluble	Solid	300.0	36287

Analysis Batch: 36598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3148-1	FS08A	Soluble	Solid	300.0	36242
890-3148-2	FS09A	Soluble	Solid	300.0	36242
890-3148-3	SW09	Soluble	Solid	300.0	36242
890-3148-4	SW10	Soluble	Solid	300.0	36242
890-3148-5	PH05	Soluble	Solid	300.0	36242
MB 880-36242/1-A	Method Blank	Soluble	Solid	300.0	36242
LCS 880-36242/2-A	Lab Control Sample	Soluble	Solid	300.0	36242
LCSD 880-36242/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36242
890-3147-A-4-B MS	Matrix Spike	Soluble	Solid	300.0	36242
890-3147-A-4-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	36242

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SDG: 03E1558026, 03E1558062

Client Sample ID: FS08A

Project/Site: ADU 624 & 641

Lab Sample ID: 890-3148-1

Date Collected: 10/04/22 09:45 Date Received: 10/05/22 09:10 Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.97 g	5 mL	36591	10/10/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36716	10/13/22 00:47	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36861	10/13/22 11:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36584	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36387	10/07/22 13:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 21:36	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36242	10/06/22 09:53	CH	EET MID
Soluble	Analysis	300.0		5			36598	10/11/22 10:31	CH	EET MID

Client Sample ID: FS09A Lab Sample ID: 890-3148-2

Matrix: Solid

Date Collected: 10/04/22 10:10 Date Received: 10/05/22 09:10

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			4.96 g	5 mL	36591	10/10/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36716	10/13/22 01:07	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36861	10/13/22 11:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36584	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	36387	10/07/22 13:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 22:41	SM	EET MID
Soluble	Leach	DI Leach			5 g	50 mL	36242	10/06/22 09:53	СН	EET MID
Soluble	Analysis	300.0		5			36598	10/11/22 10:39	CH	EET MID

Client Sample ID: SW09 Lab Sample ID: 890-3148-3

Date Collected: 10/04/22 10:40 **Matrix: Solid** Date Received: 10/05/22 09:10

	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	36591	10/10/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36716	10/13/22 01:28	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36861	10/13/22 11:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36584	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36387	10/07/22 13:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 23:03	SM	EET MID
Soluble	Leach	DI Leach			5.03 g	50 mL	36242	10/06/22 09:53	CH	EET MID
Soluble	Analysis	300.0		1			36598	10/11/22 10:47	CH	EET MID

Client Sample ID: SW10 Lab Sample ID: 890-3148-4

Date Collected: 10/04/22 13:25 **Matrix: Solid** Date Received: 10/05/22 09:10

	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	36591	10/10/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36716	10/13/22 01:48	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36861	10/13/22 11:29	AJ	EET MID

Client: Ensolum

Project/Site: ADU 624 & 641

Job ID: 890-3148-1

SDG: 03E1558026, 03E1558062

Lab Sample ID: 890-3148-4

Matrix: Solid

Matrix: Solid

Client Sample ID: SW10

Date Collected: 10/04/22 13:25 Date Received: 10/05/22 09:10

	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			36584	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36387	10/07/22 13:17	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 23:24	SM	EET MID
Soluble	Leach	DI Leach			4.98 g	50 mL	36242	10/06/22 09:53	СН	EET MID
Soluble	Analysis	300.0		1			36598	10/11/22 10:54	СН	EET MID

Client Sample ID: PH05 Lab Sample ID: 890-3148-5

Date Collected: 10/04/22 14:40 Date Received: 10/05/22 09:10

	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	36591	10/10/22 13:52	MNR	EET MID
Total/NA	Analysis	8021B		250	5 mL	5 mL	36716	10/13/22 02:29	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			36861	10/13/22 11:29	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36584	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.03 g	10 mL	36387	10/07/22 13:17	DM	EET MID
Total/NA	Analysis	8015B NM		5	1 uL	1 uL	36315	10/08/22 02:16	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	36242	10/06/22 09:53	СН	EET MID
Soluble	Analysis	300.0		5			36598	10/11/22 11:02	CH	EET MID

Client Sample ID: PH05A Lab Sample ID: 890-3148-6

Date Collected: 10/04/22 15:10 **Matrix: Solid** Date Received: 10/05/22 09:10

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 36591 10/10/22 13:52 MNR EET MID Total/NA 8021B 5 mL 5 mL 36716 10/13/22 02:08 MNR EET MID Analysis 1 Total/NA Total BTEX Analysis 1 36861 10/13/22 11:29 ΑJ **EET MID** Total/NA Analysis 8015 NM 36584 10/10/22 12:14 SM EET MID 1 10/07/22 13:17 Total/NA Prep 8015NM Prep 10.02 g 10 mL 36387 DM **EET MID** Total/NA Analysis 8015B NM 1 uL 1 uL 36315 10/07/22 23:46 SM EET MID 1 Soluble Leach DI Leach 5.05 g 50 mL 36287 10/06/22 15:32 KS EET MID Soluble Analysis 300.0 36379 10/07/22 12:39 СН EET MID 1

Laboratory References:

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

Accreditation/Certification Summary

 Client: Ensolum
 Job ID: 890-3148-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026, 03E1558062

3DG. 03E 133602

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		
,	are included in this report, bu	it the laboratory is not certific	ed by the governing authority. This list ma	ay include analytes for		
the agency does not of	fer certification.					
the agency does not of Analysis Method	fer certification . Prep Method	Matrix	Analyte			
9 ,		Matrix Solid	Analyte Total TPH			

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Method Summary

Client: Ensolum

Project/Site: ADU 624 & 641

Job ID: 890-3148-1

SDG: 03E1558026, 03E1558062

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: ADU 624 & 641

Job ID: 890-3148-1

SDG: 03E1558026, 03E1558062

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3148-1	FS08A	Solid	10/04/22 09:45	10/05/22 09:10	7'
890-3148-2	FS09A	Solid	10/04/22 10:10	10/05/22 09:10	7.5'
890-3148-3	SW09	Solid	10/04/22 10:40	10/05/22 09:10	2'-4'
890-3148-4	SW10	Solid	10/04/22 13:25	10/05/22 09:10	2'-4'
890-3148-5	PH05	Solid	10/04/22 14:40	10/05/22 09:10	10'
890-3148-6	PH05A	Solid	10/04/22 15:10	10/05/22 09:10	16'

eurofins 🛟 Xenco **Environment Testing**

Chain of Custody

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

	Relinquished by: (Signature)	Notice: Signature of this do of service. Eurofins Xenco of Eurofins Xenco. A minim	Total 200.7 / 6010 200.8 / 6020: Circle Method(s) and Metal(s) to be analyzed			MOS A + GOZD		SW10	SW09	FS09A	FS08A	Sample Identification	Total Containers:	Sample Custody Seals	Cooler Custody Seals:	Samples Received Intact:	SAMPLE RECEIPT	PO#	Sampler's Name:	Project Location:	Project Number:	Project Name:	Phone: 3	te ZIP:	Address.
	(Signature)	cument and relinquish will be liable only for thum charge of \$85.00 v	0 200.8 / 6020: d Metal(s) to be an			SE CO	30	R						Yes No	Yes No	act: (Yes) No	Temp Blank:		Connor Whitman		03E1558026, 03E1558062	ADU 624 & 641	303-887-2946	Carlsbad, NM 88220	O 122 I Mational La
	Receive	ment of samples cons he cost of samples an vill be applied to each				5 10/4/2022	4_	S 10/4/2022	S 10/4/2022	S 10/4/2022	S 10/4/2022	Matrix Date Sampled	Corrected Temperature	N/A Temperature Reading:	N/A Correction Factor:	Thermometer ID:	k: Yes No		/hitman		03E1558062	& 641		20	NO I IVY
	Received by: (Signature)	stitutes a valid pur id shall not assum project and a cha	8RCRA 13PPM TCLP/SPLP		VETA	15:10	14:40	13:25	10:40	10:10	9:45	Time Sampled	emperature:	Reading	actor:	er ID:	Wet Ice:	the lab, if received by 4:30pm	TAT starts the	Due Date:	✓ Routine	Turn A	Email: C	0	
	Life)	chase order from e any responsibilit rge of \$5 for each	RA 13PPM Texas 11 AI			lo Grab/		2'-4' Comp	2-4 Comp	7.5' Comp	7' Comp	Depth Comp	0,1	0	6.0-	7750	Ves) No	ved by 4:30pm	TAT starts the day received by		Rush	Turn Around	Email: Garrett.Green@ExxonMobil.com	City, State ZIP:	iddicas.
	5	client cor y for any sample s				4	2	-	4	-	_	# of Cont			Pa	arar	nete	rs			Code		⊕Exxo		
	Date/Time	npany to losses or ubmitted	As Ba			×	+	×	×	×	×	CHLOR		S (E	PA:	300.	0)	_	_				nMobil.	arisbac	
	10	Eurofins)	a Be B Ba Be (H	\vdash	×	+	×	×	×	×	TPH (8						+					com	Carlsbad, NM 88220	100
,	Relinquished by: (Signature)	Notice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions of service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control of Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotia	Sb As Ba Be B Cd Ca Cr Co Cu Fe Pb Mg Mn Mo Ni Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag Ti U											890-3148 Chain of Custody								ANALYSIS REQUES			
	re) Received by: (signature	signs stand to circums be enforced	X Se											ody								UEST	Deliverables: EDD A	Level III	1
	(gnature) Dater i me	ted.	Ag SiO ₂ Na Sr II Sn U V Zn Hg: 1631/245.1/7470/7471				AFE	1136151001 / 1136141001	Cost Center:	NAPP2123634554 & NAPP2215449178	Incident ID:	Sample Comments	NaCH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ ; NaSO ₃	NaHSO ₄ : NABIS	H₃PO₄: HP	H ₂ SO ₄ : H ₂ NaOH: Na	HCL: HC HNO3: HN	<u>_</u>	None: NO DI Water: H ₂ O	Preservative Codes	ADaPT LJ Other:	☐ PST/UST ☐ TRRP ☐ Level IV ☐	
			,																						_

Company Name: Project Manager:

Kalei Jennings

Bill to: (if different)

3122 National Parks Hwy

Address: Company Name:

3104 E. Green St. XTO Energy Garrett Green

Program: UST/PST 🗌 PRP 📗 Brownfields 📗 RRC 📗 Superfund 📗

Work Order Comments

www.xenco.com

Page

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State of Project:

Revised Date 08/25/2020 Rev. 2020 2

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3148-1

SDG Number: 03E1558026, 03E1558062

Login Number: 3148 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.	N/A	Refer to Job Narrative for details.
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	

Login Sample Receipt Checklist

Client: Ensolum

Job Number: 890-3148-1

SDG Number: 03E1558026, 03E1558062

List Source: Eurofins Midland List Creation: 10/07/22 01:13 PM

Login Number: 3148 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	

Page 26 of 26 10/13/2022 Released to Imaging: 2/15/2023 1:40:53 PM

Released to Imaging: 2/15/2023 1:40:53 PM

Environment Testing America

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3152-1

Laboratory Sample Delivery Group: 03E1558026 & 0E1558062

Client Project/Site: ADU 624 & 641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 10/12/2022 2:07:52 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: ADU 624 & 641 Laboratory Job ID: 890-3152-1 SDG: 03E1558026 & 0E1558062

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Definitions/Glossary

Job ID: 890-3152-1 Client: Ensolum Project/Site: ADU 624 & 641

SDG: 03E1558026 & 0E1558062

Qualifiers

GC VOA

Qualifier **Qualifier Description**

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

GC Semi VOA

Qualifier **Qualifier Description**

U Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

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" 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: ADU 624 & 641

Job ID: 890-3152-1

SDG: 03E1558026 & 0E1558062

Job ID: 890-3152-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3152-1

Receipt

The samples were received on 10/5/2022~2:44~PM. Unless otherwise noted below, the samples arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was $5.6^{\circ}C$

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS01A (890-3152-1), FS02A (890-3152-2), FS03A (890-3152-3) and FS05A (890-3152-4).

GC VOA

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

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-36322 and analytical batch 880-36315 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

HPLC/IC

Method 300_ORGFM_28D: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-36751 and analytical batch 880-36760 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.

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Lab Sample ID: 890-3152-1

Client Sample Results

Client: Ensolum

Job ID: 890-3152-1

Project/Site: ADJ 624 8 644

Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

Client Sample ID: FS01A

Date Collected: 10/05/22 11:35 Date Received: 10/05/22 14:44

Sample Depth: 7'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00198	U	0.00198	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
Toluene	0.00495		0.00198	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
Ethylbenzene	<0.00198	U	0.00198	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
m-Xylene & p-Xylene	0.00419		0.00397	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
o-Xylene	<0.00198	U	0.00198	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
Xylenes, Total	0.00419		0.00397	mg/Kg		10/10/22 08:35	10/10/22 17:44	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	108		70 - 130			10/10/22 08:35	10/10/22 17:44	1
1,4-Difluorobenzene (Surr)	105		70 - 130			10/10/22 08:35	10/10/22 17:44	1
- Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	0.00914	-	0.00397	mg/Kg			10/11/22 09:03	1
Method: SW846 8015 NM - Diese	el Range Organ	ics (DRO) ((3C)					
Analyte	Result	Qualifier	RL	Unit	<u>D</u>	Prepared	Analyzed	
		Qualifier		Mnit mg/Kg	<u>D</u>	Prepared	Analyzed 10/10/22 12:14	Dil Fac
Analyte Total TPH	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared		
Analyte	Result <49.9	Qualifier U	RL 49.9		<u>D</u>	Prepared Prepared		1
Analyte Total TPH Method: SW846 8015B NM - Dies	Result <49.9	Qualifier U nics (DRO) Qualifier	RL 49.9 (GC)	mg/Kg	=		10/10/22 12:14	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result <49.9 sel Range Orga	Qualifier U nics (DRO) Qualifier U	(GC)	mg/Kg	=	Prepared	10/10/22 12:14 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result <49.9 sel Range Orga Result <49.9	Qualifier U nics (DRO) Qualifier U	(GC) RL 49.9	mg/Kg Unit mg/Kg	=	Prepared 10/07/22 07:42	10/10/22 12:14 Analyzed 10/07/22 13:00	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 07:42 10/07/22 07:42	10/10/22 12:14 Analyzed 10/07/22 13:00 10/07/22 13:00	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result <49.9 sel Range Orga Result <49.9 <49.9 <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 07:42 10/07/22 07:42 10/07/22 07:42	Analyzed 10/07/22 13:00 10/07/22 13:00 10/07/22 13:00	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result <49.9	Qualifier U nics (DRO) Qualifier U U	RL 49.9 (GC) RL 49.9 49.9 Limits	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 07:42 10/07/22 07:42 10/07/22 07:42 Prepared	Analyzed 10/07/22 13:00 10/07/22 13:00 10/07/22 13:00 Analyzed	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 07:42 10/07/22 07:42 10/07/22 07:42 Prepared 10/07/22 07:42	Analyzed 10/07/22 13:00 10/07/22 13:00 10/07/22 13:00 Analyzed 10/07/22 13:00	Dil Fac 1 1 Dil Fac Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result <49.9	Qualifier U nics (DRO) Qualifier U U Qualifier	RL 49.9 (GC) RL 49.9 49.9 49.9 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg	=	Prepared 10/07/22 07:42 10/07/22 07:42 10/07/22 07:42 Prepared 10/07/22 07:42	Analyzed 10/07/22 13:00 10/07/22 13:00 10/07/22 13:00 Analyzed 10/07/22 13:00	1 1 1 Dil Fac 1

Client Sample ID: FS02A Lab Sample ID: 890-3152-2

Date Collected: 10/05/22 12:50 Date Received: 10/05/22 14:44

Sample Depth: 8'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
Toluene	0.00303		0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
m-Xylene & p-Xylene	<0.00401	U	0.00401	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
Xylenes, Total	<0.00401	U	0.00401	mg/Kg		10/10/22 08:35	10/10/22 18:05	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)			70 - 130			10/10/22 08:35	10/10/22 18:05	1

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2

3

7

10

12

13

Matrix: Solid

Lab Sample ID: 890-3152-2

Client: Ensolum

Job ID: 890-3152-1 Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

Client Sample ID: FS02A

Date Collected: 10/05/22 12:50 Date Received: 10/05/22 14:44

Sample Depth: 8'

Method: SW846 8021B	Volatile Organic Comp	oounds (GC) (Continued)	
WELLIOU. SWO40 OUZ ID	· voiatile Organic Comp	Journas (GC) (Continuea)	

Surrogate	%Recovery Qu	ualifier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	102	70 - 130	10/10/22 08:35	10/10/22 18:05	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00401	U	0.00401	mg/Kg			10/11/22 09:03	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/10/22 12:14	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:21	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:21	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:21	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	105	70 - 130	10/07/22 07:42	10/07/22 13:21	1
o-Terphenyl	115	70 - 130	10/07/22 07:42	10/07/22 13:21	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3210	50.3	mg/Kg			10/12/22 13:21	10

Client Sample ID: FS03A Lab Sample ID: 890-3152-3

Date Collected: 10/05/22 12:10 Date Received: 10/05/22 14:44

Sample Depth: 7'

1		
Method: SW846 8021B	- Volatilo Organic C	'ampounde (CC)
I MELITOU. SYVOHO OUZ IL	• Voiatile Organic C	onibounus (GC)

Michiga. Offoro ouz ID - Volatil	c Organic Comp		,					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
Toluene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		10/10/22 08:35	10/10/22 18:26	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	110		70 - 130			10/10/22 08:35	10/10/22 18:26	1
1,4-Difluorobenzene (Surr)	107		70 - 130			10/10/22 08:35	10/10/22 18:26	1

Mothod: TAI	SOP Total RTFY	- Total RTFY	Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00400	U	0.00400	ma/Ka			10/11/22 09:03	1

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

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<49.9	U	49.9	mg/Kg			10/10/22 12:14	1

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Matrix: Solid

Lab Sample ID: 890-3152-3

Lab Sample ID: 890-3152-4

Matrix: Solid

Client: Ensolum

Job ID: 890-3152-1 Project/Site: ADU 624 & 641

SDG: 03E1558026 & 0E1558062

Client Sample ID: FS03A

Date Collected: 10/05/22 12:10 Date Received: 10/05/22 14:44

Sample Depth: 7'

Method: SW846 8015B NM - D	iesel Range Organics (DRO) (GC)
Δnalyte	Result Qualifier

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:42	1
Diesel Range Organics (Over C10-C28)	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:42	1
Oll Range Organics (Over C28-C36)	<49.9	U	49.9	mg/Kg		10/07/22 07:42	10/07/22 13:42	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	98		70 - 130			10/07/22 07:42	10/07/22 13:42	1
o-Terphenyl	110		70 - 130			10/07/22 07:42	10/07/22 13:42	1

Method: MCAWW 300.0 - Ani	ions, Ion Chromatography - Soluble
Analysta	Popult Qualifier

Allalyte	Result Qualifier	IXL	Oilit	 riepaieu	Allalyzeu	Dillac
Chloride	3810	49.8	mg/Kg		10/12/22 13:25	10

Client Sample ID: FS05A

Date Collected: 10/05/22 12:00 Date Received: 10/05/22 14:44

Sample Depth: 7'

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

Wethod: 544646 6021B - VC	Diatile Organic Comp	ounas (GC))					
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
Toluene	0.00213		0.00199	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
o-Xylene	<0.00199	U	0.00199	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		10/10/22 08:35	10/10/22 18:47	1
	0/5	0 115						57.5

	Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	4-Bromofluorobenzene (Surr)	91		70 - 130	10/10/22 08:3	5 10/10/22 18:47	1
l	1,4-Difluorobenzene (Surr)	89		70 - 130	10/10/22 08:3	5 10/10/22 18:47	1

Method: TAL SOP Total BTEX - Total BTEX Calculation

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg		_	10/11/22 09:03	1

Method: SW846 8015 NM - Diesel Range Organics (DRO)	(GC	;)
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Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			10/10/22 12:14	1

1	Analyte F	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
(Gasoline Range Organics	<50.0	U	50.0	mg/Kg	_	10/07/22 07:42	10/07/22 14:04	1
((GRO)-C6-C10								
[Diesel Range Organics (Over	<50.0	U	50.0	mg/Kg		10/07/22 07:42	10/07/22 14:04	1
(C10-C28)								
(OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 07:42	10/07/22 14:04	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	99		70 - 130	10/07/22 07:42	10/07/22 14:04	1
o-Terphenyl	110		70 - 130	10/07/22 07:42	10/07/22 14:04	1

Client Sample Results

Client: Ensolum Job ID: 890-3152-1 SDG: 03E1558026 & 0E1558062

Project/Site: ADU 624 & 641

Client Sample ID: FS05A Lab Sample ID: 890-3152-4 Date Collected: 10/05/22 12:00 Matrix: Solid

Date Received: 10/05/22 14:44

Sample Depth: 7'

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble							
Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3720	49.9	mg/Kg			10/12/22 13:30	10

Surrogate Summary

Client: Ensolum Job ID: 890-3152-1 Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	Percent Surrogate Recovery (Acceptance Limits)
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
840-1415-A-1-D MS	Matrix Spike	267 S1+	84	
840-1415-A-1-E MSD	Matrix Spike Duplicate	187 S1+	81	
890-3152-1	FS01A	108	105	
890-3152-2	FS02A	107	102	
890-3152-3	FS03A	110	107	
890-3152-4	FS05A	91	89	
LCS 880-36503/1-A	Lab Control Sample	81	89	
LCSD 880-36503/2-A	Lab Control Sample Dup	91	91	
MB 880-36503/5-A	Method Blank	98	86	
Surrogate Legend				

DFBZ = 1,4-Difluorobenzene (Surr)

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

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

				to the sylpest comment
				Percent Surrogate Recovery (Acceptance Limits)
		1CO1	OTPH1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
890-3152-1	FS01A	108	116	
890-3152-2	FS02A	105	115	
890-3152-3	FS03A	98	110	
890-3152-4	FS05A	99	110	
890-3171-A-1-C MS	Matrix Spike	79	78	
890-3171-A-1-D MSD	Matrix Spike Duplicate	80	79	
LCS 880-36322/2-A	Lab Control Sample	97	110	
LCSD 880-36322/3-A	Lab Control Sample Dup	98	110	
MB 880-36322/1-A	Method Blank	85	97	
Surrogate Legend				
Surroyate Legena				

1CO = 1-Chlorooctane OTPH = o-Terphenyl

Job ID: 890-3152-1

Client: Ensolum Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: 840-1415-A-1-D MS

Matrix: Solid

Analysis Batch: 36501

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

MS MS Limits Surrogate %Recovery Qualifier 4-Bromofluorobenzene (Surr) 267 S1+ 70 - 130 1,4-Difluorobenzene (Surr) 70 - 130 84

Lab Sample ID: 840-1415-A-1-E MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 36501

	MSD	MSD	
Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	187	S1+	70 - 130
1,4-Difluorobenzene (Surr)	81		70 - 130

Lab Sample ID: MB 880-36503/5-A

Matrix: Solid

Analysis Batch: 36501

Client Sample ID: Method Blank Prep Type: Total/NA Prep Batch: 36503

MB MB Analyte Result Qualifier RL Unit D Prepared Analyzed Dil Fac Benzene <0.00200 U 0.00200 mg/Kg 10/10/22 08:35 10/10/22 10:55 Toluene <0.00200 U 0.00200 mg/Kg 10/10/22 08:35 10/10/22 10:55 10/10/22 08:35 10/10/22 10:55 Ethylbenzene <0.00200 U 0.00200 mg/Kg m-Xylene & p-Xylene <0.00400 U 0.00400 mg/Kg 10/10/22 08:35 10/10/22 10:55 10/10/22 10:55 o-Xylene <0.00200 U 0.00200 10/10/22 08:35 mg/Kg Xylenes, Total <0.00400 U 0.00400 mg/Kg 10/10/22 08:35 10/10/22 10:55

MB MB Qualifier Limits Dil Fac Surrogate %Recovery Prepared Analyzed 70 - 130 10/10/22 08:35 4-Bromofluorobenzene (Surr) 98 10/10/22 10:55 1,4-Difluorobenzene (Surr) 86 70 - 130 10/10/22 08:35 10/10/22 10:55

Lab Sample ID: LCS 880-36503/1-A Client Sample ID: Lab Control Sample **Matrix: Solid** Prep Type: Total/NA Analysis Batch: 36501 Prep Batch: 36503

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.09697		mg/Kg		97	70 - 130	
Toluene	0.100	0.1019		mg/Kg		102	70 - 130	
Ethylbenzene	0.100	0.09553		mg/Kg		96	70 - 130	
m-Xylene & p-Xylene	0.200	0.1994		mg/Kg		100	70 - 130	
o-Xylene	0.100	0.09869		mg/Kg		99	70 - 130	

	LCS LCS	
Surrogate	%Recovery Qualifier	Limits
4-Bromofluorobenzene (Surr)	81	70 _ 130
1.4-Difluorobenzene (Surr)	89	70 - 130

Job ID: 890-3152-1

Client: Ensolum SDG: 03E1558026 & 0E1558062 Project/Site: ADU 624 & 641

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

Lab Sample ID: LCSD 880-36503/2-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid Prep Type: Total/NA Analysis Batch: 36501 Prep Batch: 36503

	Spike	LCSD	LCSD				%Rec		RPD
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Benzene	0.100	0.09842		mg/Kg		98	70 - 130	1	35
Toluene	0.100	0.1025		mg/Kg		102	70 - 130	1	35
Ethylbenzene	0.100	0.1023		mg/Kg		102	70 - 130	7	35
m-Xylene & p-Xylene	0.200	0.2094		mg/Kg		105	70 - 130	5	35
o-Xylene	0.100	0.1077		mg/Kg		108	70 - 130	9	35

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

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

Lab Sample ID: MB 880-36322/1-A Client Sample ID: Method Blank

Matrix: Solid Prep Type: Total/NA Analysis Batch: 36315 Prep Batch: 36322

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		10/07/22 07:42	10/07/22 09:54	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		10/07/22 07:42	10/07/22 09:54	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		10/07/22 07:42	10/07/22 09:54	1

	MB	MB				
Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	85		70 - 130	10/07/22 07:42	10/07/22 09:54	1
o-Terphenyl	97		70 - 130	10/07/22 07:42	10/07/22 09:54	1

Lab Sample ID: LCS 880-36322/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid Prep Type: Total/NA Analysis Batch: 36315 Prep Batch: 36322

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	920.4		mg/Kg		92	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	985.5		mg/Kg		99	70 - 130	
C10-C28)								

	LCS		
Surrogate	%Recovery	Qualifier	Limits
1-Chlorooctane	97		70 - 130
o-Terphenyl	110		70 - 130

Lab Sample ID: LCSD 880-36322/3-A	Client Sample ID: Lab Control Sample Dup
Matrix: Solid	Prep Type: Total/NA
Analysis Ratch: 36315	Prop Batch: 36322

Analysis Batch: 36315						Prep Batch: 36322					
	Spike	LCSD	LCSD				%Rec		RPD		
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit		
Gasoline Range Organics	1000	992.9		mg/Kg		99	70 - 130	8	20		
(000) 00 040											

(GRO)-C6-C10

98

70 - 130

QC Sample Results

Job ID: 890-3152-1 Client: Ensolum Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

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

Lab Sample ID: LCSD 880-36322/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 36315 Prep Batch: 36322 Spike LCSD LCSD %Rec **RPD** Added Result Qualifier Unit %Rec Limits **RPD** Limit Analyte D

982 2

mg/Kg

1000

Diesel Range Organics (Over C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 1-Chlorooctane 98 70 130 o-Terphenyl 110 70 - 130

MS MS

Lab Sample ID: 890-3171-A-1-C MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 36315 Prep Batch: 36322

MS MS %Rec Sample Sample Spike Added Unit D %Rec Limits

Analyte Result Qualifier Result Qualifier <50.0 U 998 Gasoline Range Organics 787.0 mg/Kg 77 70 - 130 (GRO)-C6-C10 115 998 877.5 mg/Kg 76 70 - 130 Diesel Range Organics (Over

C10-C28)

%Recovery Surrogate Qualifier Limits 1-Chlorooctane 79 70 - 130 78 70 - 130 o-Terphenyl

Lab Sample ID: 890-3171-A-1-D MSD Client Sample ID: Matrix Spike Duplicate **Matrix: Solid** Prep Type: Total/NA

Analysis Batch: 36315 Prep Batch: 36322 Sample Sample Spike MSD MSD %Rec RPD

Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit Gasoline Range Organics <50.0 Ū 999 776.9 mg/Kg 76 70 - 13020 (GRO)-C6-C10 999 976.6 86 70 - 130 20 Diesel Range Organics (Over 115 mg/Kg 11

C10-C28)

MSD MSD Surrogate %Recovery Qualifier Limits

1-Chlorooctane 80 70 - 130 o-Terphenyl 79 70 - 130

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-36751/1-A Client Sample ID: Method Blank **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36760

MB MB

Result Qualifier RΙ Unit Dil Fac Analyte D Prepared Analyzed 5.00 <5.00 10/12/22 12:51 Chloride U mg/Kg

Lab Sample ID: LCS 880-36751/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 36760

LCS LCS Spike %Rec Analyte Added Result Qualifier Limits Unit %Rec Chloride 250 253.4 mg/Kg 101 90 - 110

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QC Sample Results

 Client: Ensolum
 Job ID: 890-3152-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026 & 0E1558062

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: LCSD 880-36751/3-A

Client Sample ID: Lab Control Sample Dup
Matrix: Solid

Prep Type: Soluble

Analysis Batch: 36760

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Chloride	250	252.7		mg/Kg		101	90 - 110	0	20	

Lab Sample ID: 890-3152-1 MS

Matrix: Solid

Client Sample ID: FS01A

Prep Type: Soluble

Analysis Batch: 36760

Sample Sample Spike MS MS %Rec Result Qualifier Added Limits Analyte Result Qualifier Unit D %Rec Chloride 3950 F1 2510 6948 F1 mg/Kg 120 90 - 110

Lab Sample ID: 890-3152-1 MSD

Matrix: Solid

Client Sample ID: FS01A

Prep Type: Soluble

Analysis Batch: 36760

Sample Sample Spike MSD MSD %Rec
Analyte Result Qualifier Added Result Qualifier Unit D %Rec Limits RPD

 Analyte
 Result of Chloride
 Result of Chloride
 Result of Chloride
 Qualifier of Chloride
 Qualifier of Chloride
 Qualifier of Chloride
 Unit of Chloride
 Description
 Result of Chloride
 RPD of Chloride
 Limit of Chloride
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RPD

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3152-1

 Project/Site: ADU 624 & 641
 SDG: 03E1558026 & 0E1558062

GC VOA

Analysis Batch: 36501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Total/NA	Solid	8021B	36503
890-3152-2	FS02A	Total/NA	Solid	8021B	36503
890-3152-3	FS03A	Total/NA	Solid	8021B	36503
890-3152-4	FS05A	Total/NA	Solid	8021B	36503
MB 880-36503/5-A	Method Blank	Total/NA	Solid	8021B	36503
LCS 880-36503/1-A	Lab Control Sample	Total/NA	Solid	8021B	36503
LCSD 880-36503/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	36503
840-1415-A-1-D MS	Matrix Spike	Total/NA	Solid	8021B	
840-1415-A-1-E MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	

Prep Batch: 36503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Total/NA	Solid	5035	
890-3152-2	FS02A	Total/NA	Solid	5035	
890-3152-3	FS03A	Total/NA	Solid	5035	
890-3152-4	FS05A	Total/NA	Solid	5035	
MB 880-36503/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-36503/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-36503/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	

Analysis Batch: 36641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Total/NA	Solid	Total BTEX	
890-3152-2	FS02A	Total/NA	Solid	Total BTEX	
890-3152-3	FS03A	Total/NA	Solid	Total BTEX	
890-3152-4	FS05A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 36315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Total/NA	Solid	8015B NM	36322
890-3152-2	FS02A	Total/NA	Solid	8015B NM	36322
890-3152-3	FS03A	Total/NA	Solid	8015B NM	36322
890-3152-4	FS05A	Total/NA	Solid	8015B NM	36322
MB 880-36322/1-A	Method Blank	Total/NA	Solid	8015B NM	36322
LCS 880-36322/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	36322
LCSD 880-36322/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	36322
890-3171-A-1-C MS	Matrix Spike	Total/NA	Solid	8015B NM	36322
890-3171-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	36322

Prep Batch: 36322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Total/NA	Solid	8015NM Prep	
890-3152-2	FS02A	Total/NA	Solid	8015NM Prep	
890-3152-3	FS03A	Total/NA	Solid	8015NM Prep	
890-3152-4	FS05A	Total/NA	Solid	8015NM Prep	
MB 880-36322/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-36322/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-36322/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3171-A-1-C MS	Matrix Spike	Total/NA	Solid	8015NM Prep	

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QC Association Summary

Client: Ensolum Job ID: 890-3152-1 Project/Site: ADU 624 & 641

SDG: 03E1558026 & 0E1558062

GC Semi VOA (Continued)

Prep Batch: 36322 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3171-A-1-D MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 36580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method Prep Batch
890-3152-1	FS01A	Total/NA	Solid	8015 NM
890-3152-2	FS02A	Total/NA	Solid	8015 NM
890-3152-3	FS03A	Total/NA	Solid	8015 NM
890-3152-4	FS05A	Total/NA	Solid	8015 NM

HPLC/IC

Leach Batch: 36751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Soluble	Solid	DI Leach	
890-3152-2	FS02A	Soluble	Solid	DI Leach	
890-3152-3	FS03A	Soluble	Solid	DI Leach	
890-3152-4	FS05A	Soluble	Solid	DI Leach	
MB 880-36751/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-36751/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-36751/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
890-3152-1 MS	FS01A	Soluble	Solid	DI Leach	
890-3152-1 MSD	FS01A	Soluble	Solid	DI Leach	

Analysis Batch: 36760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3152-1	FS01A	Soluble	Solid	300.0	36751
890-3152-2	FS02A	Soluble	Solid	300.0	36751
890-3152-3	FS03A	Soluble	Solid	300.0	36751
890-3152-4	FS05A	Soluble	Solid	300.0	36751
MB 880-36751/1-A	Method Blank	Soluble	Solid	300.0	36751
LCS 880-36751/2-A	Lab Control Sample	Soluble	Solid	300.0	36751
LCSD 880-36751/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	36751
890-3152-1 MS	FS01A	Soluble	Solid	300.0	36751
890-3152-1 MSD	FS01A	Soluble	Solid	300.0	36751

Client: Ensolum

Job ID: 890-3152-1 SDG: 03E1558026 & 0E1558062 Project/Site: ADU 624 & 641

Client Sample ID: FS01A

Date Collected: 10/05/22 11:35 Date Received: 10/05/22 14:44

Lab Sample ID: 890-3152-1

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.04 g	5 mL	36503	10/10/22 08:35	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/10/22 17:44	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36641	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36580	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36322	10/07/22 07:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 13:00	SM	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	36751	10/12/22 11:01	SMC	EET MID
Soluble	Analysis	300.0		10			36760	10/12/22 13:06	CH	EET MID

Client Sample ID: FS02A

Date Collected: 10/05/22 12:50 Date Received: 10/05/22 14:44

Lab Sample ID: 890-3152-2

Matrix: Solid

Dil Initial Final Batch Batch Batch Prepared Prep Type Туре Method Run Factor Amount Amount Number or Analyzed Analyst Lab Prep 5035 Total/NA 4.99 g 5 mL 36503 10/10/22 08:35 EL EET MID Total/NA 8021B 5 mL 10/10/22 18:05 **EET MID** Analysis 1 5 mL 36501 AJ Total/NA Total BTEX 36641 10/11/22 09:03 Analysis A.I **EET MID** 1 Total/NA Analysis 8015 NM 36580 10/10/22 12:14 SM **EET MID** Total/NA 36322 10/07/22 07:42 Prep 8015NM Prep 10.03 g 10 mL DM EET MID Total/NA Analysis 8015B NM 1 uL 1 uL 36315 10/07/22 13:21 SM **EET MID** Soluble 10/12/22 11:01 Leach DI Leach 4.97 g 50 mL 36751 SMC EET MID Soluble Analysis 300.0 10 36760 10/12/22 13:21 СН **EET MID**

Client Sample ID: FS03A

Date Collected: 10/05/22 12:10 Date Received: 10/05/22 14:44

Lab Sample ID: 890-3152-3

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.00 g	5 mL	36503	10/10/22 08:35	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/10/22 18:26	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36641	10/11/22 09:03	AJ	EET MID
Total/NA	Analysis	8015 NM		1			36580	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	36322	10/07/22 07:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 13:42	SM	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	36751	10/12/22 11:01	SMC	EET MID
Soluble	Analysis	300.0		10			36760	10/12/22 13:25	CH	EET MID

Client Sample ID: FS05A

Date Collected: 10/05/22 12:00 Date Received: 10/05/22 14:44

Lab Sample ID: 890-3152-4

Matrix: Solid

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	36503	10/10/22 08:35	EL	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	36501	10/10/22 18:47	AJ	EET MID
Total/NA	Analysis	Total BTEX		1			36641	10/11/22 09:03	AJ	EET MID

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Matrix: Solid

Lab Chronicle

Client: Ensolum

Job ID: 890-3152-1

Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

Client Sample ID: FS05A

Lab Sample ID: 890-3152-4

Matrix: Solid

Date Collected: 10/05/22 12:00 Matrix: Solid
Date Received: 10/05/22 14:44

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Analysis	8015 NM		1			36580	10/10/22 12:14	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	36322	10/07/22 07:42	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	36315	10/07/22 14:04	SM	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	36751	10/12/22 11:01	SMC	EET MID
Soluble	Analysis	300.0		10			36760	10/12/22 13:30	CH	EET MID

Laboratory References:

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

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Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3152-1 Project/Site: ADU 624 & 641 SDG: 03E1558026 & 0E1558062

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	T104704400-22-24	06-30-23
The following analytes the agency does not of	• •	ut the laboratory is not certif	ied by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
8015 NM		Solid	Total TPH	

Method Description

Total BTEX Calculation

Microextraction

Volatile Organic Compounds (GC)

Diesel Range Organics (DRO) (GC)

Diesel Range Organics (DRO) (GC)

Deionized Water Leaching Procedure

Anions, Ion Chromatography

Closed System Purge and Trap

Method Summary

Client: Ensolum

Method

8021B

Total BTEX 8015 NM

8015B NM

8015NM Prep

DI Leach

300.0

5035

Project/Site: ADU 624 & 641

Job ID: 890-3152-1

SDG: 03E1558026 & 0E1558062

EET MID

EET MID

Protocol	Laboratory
SW846	EET MID
TAL SOP	EET MID
SW846	EET MID
SW846	EET MID
MCAWW	EET MID
SW846	EET MID

SW846

ASTM

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

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Sample Summary

Client: Ensolum

Project/Site: ADU 624 & 641

Job ID: 890-3152-1

SDG: 03E1558026 & 0E1558062

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3152-1	FS01A	Solid	10/05/22 11:35	10/05/22 14:44	7'
890-3152-2	FS02A	Solid	10/05/22 12:50	10/05/22 14:44	8'
890-3152-3	FS03A	Solid	10/05/22 12:10	10/05/22 14:44	7'
890-3152-4	FS05A	Solid	10/05/22 12:00	10/05/22 14:44	7'

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Total 200.7 / 6010

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Relinquished by: (Signatu

eurofins 🔆 Environment Testing

Sampler's Name:

Project Location: Project Number: Phone

City, State ZIP: Address:

Project Name:

Company Name:

3122 National Parks Hwy

Address:

3104 E. Green St. XTO Energy

State of Project:

Program: UST/PST 🗌 PRP 📗 Brownfields 📗 RRC 🗎 Superfund 📗

Work Order Comments

www.xenco.com

Page

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Bill to: (if different) Company Name:

Garrett Green

Project Manager:

Kalei Jennings Ensolum

SAMPLE RECEIPT

Cooler Custody Seals:

tal Containers: imple Custody Seals:

Sample Identification

FS03A FS05A

FS02A FS01A Samples Received Intact:

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:

C		1]
Carlsbad, NM 88220	38220			City, State ZIP:	JP.	C	arisbad	Carlsbad, NM 88220	8220	Reporti	Reporting: Level III ☐ Level III ☐ PST/UST ☐ TRRP ☐ Level IV☐	è v 🗆
303-887-2946			Email:	Email: Garrett.Green@ExxonMobil.com	een@	Exxon	Mobil	com		Deliver	Deliverables: EDD	
ADU	ADU 624 & 641	2	Tum	Turn Around						ANALYSIS REQUEST	Preservative Codes	es
03E1558026 & 03E1558062	& 03E	1558062	Routine	Rush	O B	Pres. Code					None: NO DI Water: H ₂ O	9r: H ₂ O
			Due Date:								Cool: Cool MeOH: Me	Me
Conno	Connor Whitman	an	TAT starts the	TAT starts the day received by	ъ						HCL: HC HNOg: HN	¥
			the lab, if rec	the lab, if received by 4:30pm	_	rs			_		H ₂ SO ₄ : H ₂ NaOH: Na	Na
PT Temp Blank:	llank:	No Ser	Wet ice:	(es) No		nete	0)				H ₃ PO ₄ : HP	
ntact: Ges	S S	des Change Thermometer ID:	ī.	127	2		300.0				NaHSO ₄ : NABIS	
¥6	1	Correction Factor:	actor:	J. 0+	٢	_	PA: 3				Na ₂ S ₂ O ₃ : NaSO ₃	
ls: Yes No	AIR	Temperature Reading:	Reading:	\$. V	L		(EF		8		Zn Acetate+NaOH: Zn	
		Corrected Temperature	emperature:	N					,	oad-3152 Chain of Custody	NaOH+Ascorbic Acid: SAPC	ਨੈ
tification	Matrix	Date Sampled	Time Sampled	Depth Co	Grab/ #	# of Cont	CHLOR	TPH (80	BTEX (Sample Comments	its
Α	S	10/5/2022	11:35	7' Cc	Comp	_	×	×	×		Incident ID:	
PΑ	S	10/5/2022	12:50	8, 00	Comp	_	×	×	×		NAPP2123634554 & NAPP2215449179	79
3A	ဟ	10/5/2022	12:10	7 Cc	Comp	-	×	×	×		Cost Center:	
5A	S	10/5/2022	12:00	7′ Cc	Comp	-	×	×	×		1136151001 / 1136141001	41001
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10 200.8 / 6020:	020:	8R	8RCRA 13PPM	M Texas 11		Al Sb As Ba Be	As B	a Be	B Cd Ca	Cr Co Cu Fe Pb Mg Mn Mo	Ni K Se	
nd Metal(s) to be analyzed	e analy	žed	TCLP / SF	TCLP / SPLP 6010: 8RCRA	8RCR		As	ВаВ	cd Cr	Sb As Ba Be Cd Cr Co Cu Pb Mn Mo Ni Se Ag	Ag TI U Hg: 1631 / 245.1 / 7470 / 7471	
locument and reling to will be liable only i	uishment of or the cost	f samples cons t of samples and applied to each	titutes a valid po d shall not assu project and a cl	urchase order me any respon narge of \$5 for	from clie sibility f	ent com or any k	pany to osses o bmitted	Eurofins r expens to Euro	Xenco, its at es incurred t fins Xenco, b	ocument 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 to 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 inum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofine Xenco, but not analyzed. These terms will be enforced unless previously negotiat	Jocument 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 to 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 incurred by the client if such losses are due to circumstances beyond the control incurred by the client if such losses are due to circumstances beyond the control incurred by the client is such as a province of section of the control incurred by the client is such as a province of the control incurred by the control incurred by the client is such as a province of the control incurred by the control incurred by the control incurred by the client is such as a province of the control incurred by the contro	
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Revised Date: 08/25/2020 Rev. 2020 2

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3152-1

SDG Number: 03E1558026 & 0E1558062

List Source: Eurofins Carlsbad

List Number: 1

Login Number: 3152

Creator: Stutzman, Amanda

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

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3152-1

 SDG Number: 03E1558026 & 0E1558062

SDG Nulliber: 03E 1336020 & 0E 1336062

List Source: Eurofins Midland
List Number: 2
List Creation: 10/07/22 11:00 AM

Creator: Rodriguez, Leticia

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

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<6mm (1/4").



ANALYTICAL REPORT

Environment Testing

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

Laboratory Job ID: 890-3415-1

Laboratory SDG: 03E1558026 & 03E1558062

Client Project/Site: ADU 624/641

For:

💸 eurofins

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/10/2022 4:18:07 PM

Jessica Kramer, Project Manager (432)704-5440

Jessica.Kramer@et.eurofinsus.com

.....LINKS

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

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

Client: Ensolum Project/Site: ADU 624/641 Laboratory Job ID: 890-3415-1 SDG: 03E1558026 & 03E1558062

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Definitions/Glossary

Job ID: 890-3415-1 Client: Ensolum Project/Site: ADU 624/641

SDG: 03E1558026 & 03E1558062

Qualifiers

GC VOA Qualifier

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

Qualifier Description

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: ADU 624/641

Job ID: 890-3415-1

SDG: 03E1558026 & 03E1558062

Job ID: 890-3415-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3415-1

Receipt

The sample was received on 11/8/2022 8:27 AM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was 5.0°C

Receipt Exceptions

The following sample was received and analyzed from an unpreserved bulk soil jar: FS04A (890-3415-1).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39063 and analytical batch 880-39062 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.

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-39116 and analytical batch 880-39056 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-39116 and analytical batch 880-39056 was outside control limits. Sample non-homogeneity is suspected.

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.

3

4

J

8

11

13

Matrix: Solid

Lab Sample ID: 890-3415-1

Client Sample Results

Job ID: 890-3415-1 Client: Ensolum

Project/Site: ADU 624/641 SDG: 03E1558026 & 03E1558062

Client Sample ID: FS04A

Date Collected: 11/07/22 02:30 Date Received: 11/08/22 08:27

Sample Depth: 16

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/09/22 13:00	11/09/22 18:38	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	107		70 - 130			11/09/22 13:00	11/09/22 18:38	1
1,4-Difluorobenzene (Surr)	112		70 - 130			11/09/22 13:00	11/09/22 18:38	1
Method: TAL SOP Total BTEX - 1	Total BTEX Cald	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399	U	0.00399	mg/Kg			11/10/22 11:59	1
	•		•			_		
Analyte	Result	ics (DRO) (C	RL	Unit	<u>D</u>	Prepared	Analyzed	Dil Fac
Analyte Total TPH	Result 52.8	Qualifier	RL 49.8	Unit mg/Kg	<u>D</u>	Prepared	Analyzed 11/10/22 09:40	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Die:	Result 52.8 sel Range Orga	Qualifier nics (DRO)	RL 49.8	mg/Kg		<u> </u>	11/10/22 09:40	1
Analyte Total TPH Method: SW846 8015B NM - Die: Analyte	Result 52.8 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8 (GC)	mg/Kg	<u>D</u>	Prepared	11/10/22 09:40 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics	Result 52.8 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8	mg/Kg		<u> </u>	11/10/22 09:40	1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over	Result 52.8 sel Range Orga	Qualifier nics (DRO) Qualifier	RL 49.8 (GC)	mg/Kg		Prepared	11/10/22 09:40 Analyzed	1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28)	Result 52.8 sel Range Orga Result <49.8	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8	mg/Kg Unit mg/Kg		Prepared 11/09/22 14:01	11/10/22 09:40 Analyzed 11/10/22 02:03	Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36)	Result 52.8 sel Range Orga Result <49.8 52.8	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/09/22 14:01 11/09/22 14:01	11/10/22 09:40 Analyzed 11/10/22 02:03 11/10/22 02:03	1 Dil Fac 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate	Result	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8 49.8	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/09/22 14:01 11/09/22 14:01 11/09/22 14:01	Analyzed 11/10/22 02:03 11/10/22 02:03 11/10/22 02:03	1 Dil Fac 1 1
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) Oll Range Organics (Over C28-C36) Surrogate 1-Chlorooctane	Result	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8 49.8 49.8 Limits	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/09/22 14:01 11/09/22 14:01 11/09/22 14:01 Prepared	Analyzed 11/10/22 09:40 Analyzed 11/10/22 02:03 11/10/22 02:03 Analyzed	Dil Fac 1 1 Dil Fac
Analyte Total TPH Method: SW846 8015B NM - Dies Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorooctane o-Terphenyl	Result	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/09/22 14:01 11/09/22 14:01 11/09/22 14:01 Prepared 11/09/22 14:01	Analyzed 11/10/22 02:03 11/10/22 02:03 11/10/22 02:03 Analyzed 11/10/22 02:03	1 Dil Fac 1 Dil Fac 1
Method: SW846 8015 NM - Diese Analyte Total TPH Method: SW846 8015B NM - Diese Analyte Gasoline Range Organics (GRO)-C6-C10 Diesel Range Organics (Over C10-C28) OII Range Organics (Over C28-C36) Surrogate 1-Chlorocotane o-Terphenyl Method: MCAWW 300.0 - Anions Analyte	Result	Qualifier nics (DRO) Qualifier U	RL 49.8 (GC) RL 49.8 49.8 49.8 49.8 Limits 70 - 130 70 - 130	mg/Kg Unit mg/Kg mg/Kg		Prepared 11/09/22 14:01 11/09/22 14:01 11/09/22 14:01 Prepared 11/09/22 14:01	Analyzed 11/10/22 02:03 11/10/22 02:03 11/10/22 02:03 Analyzed 11/10/22 02:03	1 Dil Fac 1 Dil Fac 1

Surrogate Summary

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641 SDG: 03E1558026 & 03E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21259-A-1-I MS	Matrix Spike	90	114	
880-21259-A-1-J MSD	Matrix Spike Duplicate	104	98	
890-3415-1	FS04A	107	112	
LCS 880-39063/1-A	Lab Control Sample	92	113	
LCSD 880-39063/2-A	Lab Control Sample Dup	95	117	
MB 880-39063/5-A	Method Blank	78	100	
Surrogate Legend				

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)	
890-3415-1	FS04A	92	99	
890-3418-A-1-I MS	Matrix Spike	74	80	
890-3418-A-1-J MSD	Matrix Spike Duplicate	86	78	
LCS 880-39116/2-A	Lab Control Sample	100	104	
LCSD 880-39116/3-A	Lab Control Sample Dup	99	103	
MB 880-39116/1-A	Method Blank	95	96	

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641

SDG: 03E1558026 & 03E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39063/5-A

Matrix: Solid

Analysis Batch: 39062

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39063

	MB	MR						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Xylenes, Total	<0.00400	U	0.00400	mg/Kg		11/09/22 08:53	11/09/22 11:32	1

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	11/09/22 08:53	11/09/22 11:32	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 08:53	11/09/22 11:32	1

Lab Sample ID: LCS 880-39063/1-A

Matrix: Solid

Analysis Batch: 39062

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 39063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1065		mg/Kg		107	70 - 130	
Toluene	0.100	0.09243		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.08737		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1791		mg/Kg		90	70 - 130	
o-Xylene	0.100	0.08740		mg/Kg		87	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-39063/2-A

Matrix: Solid

Analysis Batch: 39062

Client Sample ID: Lab Control Sample Dup	Client Sam	ple ID: Lab	Control San	nple Dup
--	------------	-------------	--------------------	----------

Prep Type: Total/NA

Prep Batch: 39063

	Spike	LCSD	LCSD				%Rec		RPD	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit	
Benzene	0.100	0.1066		mg/Kg		107	70 - 130	0	35	
Toluene	0.100	0.08974		mg/Kg		90	70 - 130	3	35	
Ethylbenzene	0.100	0.08748		mg/Kg		87	70 - 130	0	35	
m-Xylene & p-Xylene	0.200	0.1783		mg/Kg		89	70 - 130	0	35	
o-Xylene	0.100	0.08857		mg/Kg		89	70 - 130	1	35	

LCSD LCSD

<0.00200 U

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

Lab Sample ID: 880-21259-A-1-I MS

Matrix: Solid

Toluene

Analysis Batch: 39062

Client Sample ID: Matrix Spike

70 - 130

81

Prep Type: Total/NA

Prep Batch: 39063

MS MS Sample Sample Spike Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits <0.00200 U F1 F2 0.0998 0.09660 97 70 - 130 Benzene mg/Kg

0.0998

Eurofins Carlsbad

0.08183

mg/Kg

Prep Batch: 39063

QC Sample Results

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641 SDG: 03E1558026 & 03E1558062

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

Lab Sample ID: 880-21259-A-1-I MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 39062

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits Ethylbenzene <0.00200 U 0.0998 0.07769 78 70 - 130 mg/Kg m-Xylene & p-Xylene <0.00401 0.200 0.1573 mg/Kg 79 70 - 130 0.0998 o-Xylene <0.00200 U 0.07732 77 70 - 130 mg/Kg

MS MS

Surrogate	%Recovery (Qualifier	Limits
4-Bromofluorobenzene (Surr)	90		70 - 130
1,4-Difluorobenzene (Surr)	114		70 - 130

Lab Sample ID: 880-21259-A-1-J MSD Client Sample ID: Matrix Spike Duplicate Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 39062

Prep Batch: 39063 Sample Sample Spike MSD MSD RPD Result Qualifier Added RPD Limit Analyte Result Qualifier Unit %Rec Limits 0.0996 Benzene <0.00200 U F1 F2 0.06729 F1 F2 mg/Kg 68 70 - 130 36 35 Toluene <0.00200 U 0.0996 0.07180 mg/Kg 71 70 - 130 13 35 Ethylbenzene <0.00200 U 0.0996 0.08519 86 70 - 130 9 35 mg/Kg 0.199 0.1658 83 70 - 130 35 m-Xylene & p-Xylene <0.00401 U mg/Kg 5 0.0996 <0.00200 U 0.08146 82 70 - 130 o-Xylene mg/Kg 5

MSD MSD

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	104		70 - 130
1,4-Difluorobenzene (Surr)	98		70 - 130

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

Lab Sample ID: MB 880-39116/1-A

Matrix: Solid

Analysis Batch: 39056

	Client Sample ID: Method Blank
	Prep Type: Total/NA
	Prep Batch: 39116
3 MB	

	IND	14.15						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/09/22 20:15	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/09/22 20:15	1
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/09/22 20:15	1

MB MB

MR

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	95		70 - 130	11/09/22 14:01	11/09/22 20:15	1
o-Terphenyl	96		70 - 130	11/09/22 14:01	11/09/22 20:15	1

Lab Sample ID: LCS 880-39116/2-A

Matrix: Solid

Analysis Batch: 39056							Prep	Batch: 39116
	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	814.3		mg/Kg		81	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	939.9		mg/Kg		94	70 - 130	
C10-C28)								

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Prep Type: Total/NA

Client Sample ID: Lab Control Sample

Job ID: 890-3415-1

mg/Kg

SDG: 03E1558026 & 03E1558062

93

70 - 130

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

Lab Sample ID: LCS 880-39116/2-A Client Sample ID: Lab Control Sample Prep Type: Total/NA

Matrix: Solid

Project/Site: ADU 624/641

Client: Ensolum

Analysis Batch: 39056

Prep Batch: 39116 LCS LCS

Surrogate %Recovery Qualifier Limits 1-Chlorooctane 100 70 - 130 o-Terphenyl 104 70 - 130

Lab Sample ID: LCSD 880-39116/3-A Client Sample ID: Lab Control Sample Dup Prep Type: Total/NA

Matrix: Solid

Analysis Batch: 39056

Diesel Range Organics (Over

Prep Batch: 39116 Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 870.1 87 70 - 13020 Gasoline Range Organics mg/Kg 7 (GRO)-C6-C10

926.4

1000

C10-C28)

LCSD LCSD Surrogate %Recovery Qualifier Limits 99 70 - 130 1-Chlorooctane o-Terphenyl 103 70 - 130

Lab Sample ID: 890-3418-A-1-I MS Client Sample ID: Matrix Spike

Matrix: Solid

Prep Type: Total/NA Analysis Batch: 39056 Prep Batch: 39116 Sample Sample Spike MS MS

Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U F2 997 763.6 mg/Kg 77 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 807.0 mg/Kg 81 70 - 130

C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 74 o-Terphenyl 80 70 - 130

Lab Sample ID: 890-3418-A-1-J MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 39056

Matrix: Solid

-	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Gasoline Range Organics (GRO)-C6-C10	<50.0	U F2	999	963.3	F2	mg/Kg		96	70 - 130	23	20
Diesel Range Organics (Over	<50.0	U	999	803.3		mg/Kg		80	70 - 130	0	20

C10-C28)

	INISD	IVISD		
Surrogate	%Recovery	Qualifier	Limits	
1-Chlorooctane	86		70 - 130	
o-Terphenyl	78		70 - 130	

Eurofins Carlsbad

Prep Type: Total/NA

Prep Batch: 39116

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641 SDG: 03E1558026 & 03E1558062

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39114/1-A

Matrix: Solid

Analysis Batch: 39143

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

мв мв

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/10/22 13:25

Lab Sample ID: LCS 880-39114/2-A Client Sample ID: Lab Control Sample **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 39143

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 264.0 mg/Kg 106 90 - 110

Lab Sample ID: LCSD 880-39114/3-A Client Sample ID: Lab Control Sample Dup **Matrix: Solid Prep Type: Soluble**

Analysis Batch: 39143

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 250.7 mg/Kg 100 90 - 110

Lab Sample ID: 880-21350-A-11-B MS Client Sample ID: Matrix Spike **Prep Type: Soluble**

Matrix: Solid

Analysis Batch: 39143

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added %Rec Result Qualifier Unit Limits Chloride 81.5 249 335.6 102 90 - 110 mg/Kg

Lab Sample ID: 880-21350-A-11-C MSD

Matrix: Solid

Analysis Batch: 39143

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit 249 Chloride 81.5 332.1 mg/Kg 101 90 - 110 20

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Client Sample ID: Matrix Spike Duplicate

Prep Type: Soluble

QC Association Summary

 Client: Ensolum
 Job ID: 890-3415-1

 Project/Site: ADU 624/641
 SDG: 03E1558026 & 03E1558062

GC VOA

Analysis Batch: 39062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Total/NA	Solid	8021B	39063
MB 880-39063/5-A	Method Blank	Total/NA	Solid	8021B	39063
LCS 880-39063/1-A	Lab Control Sample	Total/NA	Solid	8021B	39063
LCSD 880-39063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39063
880-21259-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	39063
880-21259-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39063

Prep Batch: 39063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Total/NA	Solid	5035	<u> </u>
MB 880-39063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21259-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-21259-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 39232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 39056

Lab Sample ID 890-3415-1	Client Sample ID FS04A	Prep Type Total/NA	Matrix Solid	Method 8015B NM	Prep Batch 39116
MB 880-39116/1-A	Method Blank	Total/NA	Solid	8015B NM	39116
LCS 880-39116/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39116
LCSD 880-39116/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39116
890-3418-A-1-I MS	Matrix Spike	Total/NA	Solid	8015B NM	39116
890-3418-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39116

Prep Batch: 39116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Total/NA	Solid	8015NM Prep	
MB 880-39116/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39116/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39116/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3418-A-1-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3418-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

Analysis Batch: 39200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Total/NA	Solid	8015 NM	

HPLC/IC

Leach Batch: 39114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Soluble	Solid	DI Leach	
MB 880-39114/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39114/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39114/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	

Eurofins Carlsbad

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3415-1

 Project/Site: ADU 624/641
 SDG: 03E1558026 & 03E1558062

HPLC/IC (Continued)

Leach Batch: 39114 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
880-21350-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3415-1	FS04A	Soluble	Solid	300.0	39114
MB 880-39114/1-A	Method Blank	Soluble	Solid	300.0	39114
LCS 880-39114/2-A	Lab Control Sample	Soluble	Solid	300.0	39114
LCSD 880-39114/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39114
880-21350-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	39114
880-21350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	300.0	39114

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Lab Chronicle

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641

SDG: 03E1558026 & 03E1558062

Client Sample ID: FS04A

Lab Sample ID: 890-3415-1

Matrix: Solid

Date Collected: 11/07/22 02:30 Date Received: 11/08/22 08:27

	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	39063	11/09/22 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39062	11/09/22 18:38	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39232	11/10/22 11:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			39200	11/10/22 09:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.04 g	10 mL	39116	11/09/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39056	11/10/22 02:03	AJ	EET MID
Soluble	Leach	DI Leach			4.99 g	50 mL	39114	11/09/22 13:31	KS	EET MID
Soluble	Analysis	300.0		5			39143	11/10/22 16:07	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: 890-3415-1

 Project/Site: ADU 624/641
 SDG: 03E1558026 & 03E1558062

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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 the agency does not of	•	ut the laboratory is not certifi	ed by the governing authority. This list ma	ay include analytes fo
Analysis Method	Prep Method	Matrix	Analyte	
,				
8015 NM		Solid	Total TPH	

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Method Summary

Client: Ensolum Job ID: 890-3415-1 Project/Site: ADU 624/641

SDG: 03E1558026 & 03E1558062

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: ADU 624/641

Job ID: 890-3415-1

SDG: 03E1558026 & 03E1558062

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Depth
890-3415-1	FS04A	Solid	11/07/22 02:30	11/08/22 08:27	16

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Relinquished by: (Signature)

8

1.8.97

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Revised Date: 08/25/2020 Rev. 2020.2

Received by: (Signature)

eurofins

Xenco

Environment Testing

Project Manager:

Company Name:

City, State ZIP

Chain of Custody

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

Work Order No:

											www.xenco.com	com Page of
roject Manager: Ka	Kalei Jennings				Bill to: (if different)	erent)	Ga	Garrett Green	Green		Work Orc	Work Order Comments
	Ensolum				Company Name:	ame:	×	XTO Energy	ergy		Program: UST/PST PRP E] PRP☐ Brownfields ☐ RRC ☐ Superfund ☐
	3122 National Parks Hwy	rks Hwy	,		Address:		31	04 E.	3104 E. Green St		State of Project:	1
e ZIP:	Carlsbad, NM 88220	20			City, State ZIP	ZIP:	Ca	ırlsbac	Carlsbad, NM 88220	0	Reporting: Level II D Level III PST/UST TRRP	PST/UST TRRP Level IV
	303-887-2946			Email:	Email: Garrett.Green@ExxonMobil.com	een@E	xxon	Mobil	.com		Deliverables: EDD A	ADaPT Other:
roject Name:	ADU 624 / 641	4/641		Turn	Turn Around		-			ANALYSIS REQ	QUEST	Preservative Codes
roject Number:	03E1558026 & 03E1558062	03E16	58062	Routine	Rush	C Pr	Pres.					None: NO Di Water: H ₂ O
roject Location:				Due Date:	2 Day				_			Cool: Cool MeOH: Me
ampler's Name:	Connor Whitman	Whitma	л	TAT starts th	TAT starts the day received by	d by					-	HCL: HC HNO3: HN
0 #				the lab, if rec	the lab, if received by 4:30pm	Ц.	18	_	-			H ₂ S0 ₄ : H ₂ NaOH: Na
AMPLE RECEIPT	Temp Blank:		Yes No	Wet Ice:	Yes No		nete	-				H₃PO₄: HP
amples Received Intact:	~			M	mont							NaHSO ₄ : NABIS
ooler Custody Seals:	~	N/A Cc	NA Correction Factor:		-0-0					890-3415 Chain	ain of Custody	Na ₂ S ₂ O ₃ : NaSO ₃
ample Custody Seals:	No	WA Te	Temperature Reading:	eading:	ري م		: /F) (E)			Zn Acetate+NaOH: Zn
otal Containers:		Coc	Corrected Temperature:	perature:	7.0		IDES	-		_		NaOH+Ascorbic Acid: SAPC
Sample Identification		Matrix	Date Sampled	Time Sampled	Depth Co	Grab/ # of Comp Cont	Cont of		TPH (80			Sample Comments
FS04A		S	11/7/2022	2:30	16' C	Comp	1	×	×			Incident ID:
							_		_			NAPP2123634554 / NAPP2215449179
	/	4				_		-				Cost Center:
		4					-	\dashv	_			1136151001 / 1136141001
												AFE
		_										
						_						
							X	H				
		+				+		A	2			
Total 200.7 / 6010	200.8 / 6020:	0.	8RC	8RCRA 13PPM	M Texas 11	11 2	S	As Ba	ВеВ	Cd Ca Cr Co Cu Fe Pb	Mg Mn Mo Ni K Se Ag SiO ₂	D ₂ Na Sr Tl Sn U V Zn
ircle Method(s) and Metal(s) to be analyzed	Metal(s) to be a	ınalyzed		TCLP / SF	סרו	8RCR		As	за Ве	Cr Co Cu Pb Mn	Ni Se Ag TI U	Hg: 1631 / 245.1 / 7470 / 7471
otice: Signature of this docu	ument and relinquish	ment of sa	amples constitu	ıtes a valid pur	chase order fro	om client	compan	y to Eu	ırofins Xer	its affiliates and subcontractors.	otice: Signature of this document and relinquishment of samples constitutes a valid purchase order from client company to Eurofins Xenco, its affiliates and subcontractors. It assigns standard terms and conditions	
service. Eurofins Xenco w Eurofins Xenco. A minimu	vill be liable only for t ım charge of \$85.00 v	he cost of vill be app	samples and s	hall not assum oject and a cha	e any responsi rge of \$5 for ea	bility for ach samp	e subm	es or e	Eurofins :	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 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 v	service. Eurofins Xenco will be liable only for the cost of samples and shall not assume any responsibility for any losses or expenses incurred by the client if such losses are due to circumstances beyond the control Eurofins Xenco. A minimum charge of \$85.00 will be applied to each project and a charge of \$5 for each sample submitted to Eurofins Xenco, but not analyzed. These terms will be enforced unless previously negotiated.	ated.

Sample Custody Seals:

SAMPLE RECEIPT

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

Login Sample Receipt Checklist

Job Number: 890-3415-1

SDG Number: 03E1558026 & 03E1558062

List Source: Eurofins Carlsbad

Login Number: 3415 List Number: 1 Creator: Clifton, Cloe

Client: Ensolum

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

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3415-1

SDG Number: 03E1558026 & 03E1558062

Login Number: 3415 **List Source: Eurofins Midland** List Number: 2 List Creation: 11/09/22 10:47 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

ANALYTICAL REPORT

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

Laboratory Job ID: 890-3416-1

Laboratory Sample Delivery Group: 03E1558026/03E1558062

Client Project/Site: ADU 624/641

For:

Ensolum 705 W. Wadley Suite 210 Midland, Texas 79701

Attn: Kalei Jennings

RAMER

Authorized for release by: 11/10/2022 4:18:15 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 signature.

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

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

Client: Ensolum Project/Site: ADU 624/641 Laboratory Job ID: 890-3416-1 SDG: 03E1558026/03E1558062

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Definitions/Glossary

Job ID: 890-3416-1 Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Qualifiers

GC VOA Qualifier

F1 MS and/or MSD recovery exceeds control limits.

F2 MS/MSD RPD exceeds control limits

Qualifier Description

Indicates the analyte was analyzed for but not detected.

GC Semi VOA

Qualifier **Qualifier Description**

F2 MS/MSD RPD exceeds control limits

Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier **Qualifier Description**

Indicates the analyte was analyzed for but not detected.

Glossary

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

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

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

DFR Duplicate Error Ratio (normalized absolute difference)

Dil Fac **Dilution Factor**

DL Detection Limit (DoD/DOE)

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

Decision Level Concentration (Radiochemistry) DLC

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

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

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

NC Not Calculated

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

NEG Negative / Absent POS Positive / Present

PQL Practical Quantitation Limit

PRES Presumptive QC **Quality Control**

RER Relative Error Ratio (Radiochemistry)

RL Reporting Limit or Requested Limit (Radiochemistry)

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

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

TNTC Too Numerous To Count

Case Narrative

Client: Ensolum

Project/Site: ADU 624/641 SDG:

Job ID: 890-3416-1

SDG: 03E1558026/03E1558062

Job ID: 890-3416-1

Laboratory: Eurofins Carlsbad

Narrative

Job Narrative 890-3416-1

Receipt

The samples were received on 11/8/2022 11:46 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 5.8°C

Receipt Exceptions

The following samples were received and analyzed from an unpreserved bulk soil jar: FS12 (890-3416-1), FS13 (890-3416-2) and FS14 (890-3416-3).

GC VOA

Method 8021B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries and precision for preparation batch 880-39063 and analytical batch 880-39062 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.

GC Semi VOA

Method 8015MOD_NM: The method blank for preparation batch 880-39116 and analytical batch 880-39056 contained Diesel Range Organics (Over C10-C28) above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method 8015MOD_NM: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 880-39116 and analytical batch 880-39056 was outside control limits. Sample non-homogeneity is suspected.

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

HPLC/IC

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

Eurofins Carlsbad 11/10/2022

Matrix: Solid

Lab Sample ID: 890-3416-1

Client Sample Results

Client: Ensolum Job ID: 890-3416-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS12

Date Collected: 11/08/22 09:10 Date Received: 11/08/22 11:46

Sample Depth: 12'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
Toluene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
o-Xylene	< 0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/09/22 13:00	11/09/22 18:58	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	101		70 - 130			11/09/22 13:00	11/09/22 18:58	1
1,4-Difluorobenzene (Surr)	110		70 - 130			11/09/22 13:00	11/09/22 18:58	1
Method: TAL SOP Total BTEX	- Total BTEX Cale	culation						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Analyte Total BTEX	<0.00398		0.00398	mg/Kg	D	Prepared	Analyzed 11/10/22 11:59	Dil Fac
	<0.00398	U	0.00398		<u>D</u>	Prepared		Dil Fac
Total BTEX	<0.00398	U	0.00398		<u>D</u>	Prepared Prepared		Dil Fac
Total BTEX Method: SW846 8015 NM - Die	<0.00398	ics (DRO) (0.00398 GC)	mg/Kg			11/10/22 11:59	1
Total BTEX Method: SW846 8015 NM - Dic Analyte Total TPH	<0.00398 esel Range Organ Result 63.1	ics (DRO) (0.00398 GC) RL 49.9	mg/Kg			11/10/22 11:59 Analyzed	1
Total BTEX Method: SW846 8015 NM - Dic Analyte	<0.00398 esel Range Organ Result 63.1 iiesel Range Orga	ics (DRO) (0.00398 GC) RL 49.9	mg/Kg			11/10/22 11:59 Analyzed	1

Oll Range Organics (Over C28-C36)	<49.9 U	49.9	mg/Kg	11/09/22 14:01	11/10/22 02:25	1
Surrogate	%Recovery Qualifier	Limits		Prepared	Analyzed	Dil Fac
1-Chlorooctane	97	70 - 130		11/09/22 14:01	11/10/22 02:25	1
o-Terphenyl	103	70 - 130		11/09/22 14:01	11/10/22 02:25	1

49.9

mg/Kg

11/09/22 14:01

11/10/22 02:25

63.1

١	Method: MCAWW 300.0 - Anions, I	on Chromato	graphy - Soli	uble					
	Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
l	Chloride	2500		24.9	mg/Kg			11/10/22 16:14	5

Client Sample ID: FS13 Lab Sample ID: 890-3416-2 Date Collected: 11/08/22 09:15 **Matrix: Solid**

Date Received: 11/08/22 11:46

Diesel Range Organics (Over

C10-C28)

Sample Depth: 9'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
m-Xylene & p-Xylene	<0.00399	U	0.00399	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
Xylenes, Total	<0.00399	U	0.00399	mg/Kg		11/09/22 13:00	11/09/22 19:19	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		70 - 130			11/09/22 13:00	11/09/22 19:19	1

Matrix: Solid

Lab Sample ID: 890-3416-2

Client Sample Results

Client: Ensolum Job ID: 890-3416-1

Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS13 Date Collected: 11/08/22 09:15

Date Received: 11/08/22 11:46

Sample Depth: 9'

Method: SW846 8021B - Volatile Or	ganic Compounds (G	2)	(Continued)

Surrogate	%Recovery Qualifi	ier Limits	Prepared	Analyzed	Dil Fac
1,4-Difluorobenzene (Surr)	107	70 - 130	11/09/22 13:00	11/09/22 19:19	1

	V T (I DTEV 0 I I I I
Method: TAL SOP Total BTE	X - Iotal BIEX Calculation

Analyte	Result Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00399 U	0.00399	mg/Kg			11/10/22 11:59	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/10/22 09:40	1

Method: SW846 8015B NM - Diesel Range Organics	(DRO)	(GC)	١
motified. Offerto College Ithin Biodol Rungo Organico	(5.10)	, , , , ,	,

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac		
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 02:47	1		
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 02:47	1		
Oll Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 02:47	1		
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac		

Surrogate	%Recovery Qualifier	Limits	Prepared	Analyzed	Dil Fac
1-Chlorooctane	88	70 - 130	11/09/22 14:01	11/10/22 02:47	1
o-Terphenyl	93	70 - 130	11/09/22 14:01	11/10/22 02:47	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble

Analyte	Result Qualit		Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1200	4.99	mg/Kg			11/10/22 16:20	1

Client Sample ID: FS14 Lab Sample ID: 890-3416-3

Date Collected: 11/08/22 09:30 Date Received: 11/08/22 11:46

Sample Depth: 7.5'

Markland, CIMO 40 00	21B - Volatile Organic	O
IVIATOON' SVVXAN XII	21B - Volatile Circanic	L.Omnollings (Lat.)

motification of the total of the transfer of t									
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac	
Benzene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
Toluene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
Ethylbenzene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
m-Xylene & p-Xylene	<0.00398	U	0.00398	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
o-Xylene	<0.00199	U	0.00199	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
Xylenes, Total	<0.00398	U	0.00398	mg/Kg		11/09/22 13:00	11/09/22 19:39	1	
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
4-Bromofluorobenzene (Surr)	94		70 - 130			11/09/22 13:00	11/09/22 19:39	1	
1,4-Difluorobenzene (Surr)	102		70 - 130			11/09/22 13:00	11/09/22 19:39	1	

Method: TAI	SOP Total RTFY	- Total BTFX Calculation	

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total BTEX	<0.00398	U	0.00398	mg/Kg			11/10/22 11:59	1

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Total TPH	<50.0	U	50.0	mg/Kg			11/10/22 09:40	1

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Matrix: Solid

Client Sample Results

Client: Ensolum Job ID: 890-3416-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Client Sample ID: FS14 Lab Sample ID: 890-3416-3

Date Collected: 11/08/22 09:30 Matrix: Solid Date Received: 11/08/22 11:46

Sample Depth: 7.5'

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline Range Organics (GRO)-C6-C10	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 03:08	1
Diesel Range Organics (Over C10-C28)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 03:08	1
OII Range Organics (Over C28-C36)	<50.0	U	50.0	mg/Kg		11/09/22 14:01	11/10/22 03:08	1
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac
1-Chlorooctane	87		70 - 130			11/09/22 14:01	11/10/22 03:08	1
o-Terphenyl	93		70 - 130			11/09/22 14:01	11/10/22 03:08	1

Method: MCAWW 300.0 - Anions, Ion Chromatography - Soluble								
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2310		24.8	mg/Kg			11/10/22 16:27	5

Surrogate Summary

Client: Ensolum Job ID: 890-3416-1 Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

Method: 8021B - Volatile Organic Compounds (GC)

Matrix: Solid Prep Type: Total/NA

-				Percent Surrogate
		BFB1	DFBZ1	
Lab Sample ID	Client Sample ID	(70-130)	(70-130)	
880-21259-A-1-I MS	Matrix Spike	90	114	
880-21259-A-1-J MSD	Matrix Spike Duplicate	104	98	
890-3416-1	FS12	101	110	
890-3416-2	FS13	99	107	
890-3416-3	FS14	94	102	
LCS 880-39063/1-A	Lab Control Sample	92	113	
LCSD 880-39063/2-A	Lab Control Sample Dup	95	117	
MB 880-39063/5-A	Method Blank	78	100	
Surrogate Legend				
BFB = 4-Bromofluorobenz	ene (Surr)			

DFBZ = 1,4-Difluorobenzene (Surr)

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

Matrix: Solid Prep Type: Total/NA

_			
		1CO1	OTPH1
Lab Sample ID	Client Sample ID	(70-130)	(70-130)
890-3416-1	FS12	97	103
890-3416-2	FS13	88	93
890-3416-3	FS14	87	93
890-3418-A-1-I MS	Matrix Spike	74	80
890-3418-A-1-J MSD	Matrix Spike Duplicate	86	78
LCS 880-39116/2-A	Lab Control Sample	100	104
LCSD 880-39116/3-A	Lab Control Sample Dup	99	103
MB 880-39116/1-A	Method Blank	95	96

Surrogate Legend

1CO = 1-Chlorooctane

OTPH = o-Terphenyl

Client: Ensolum Job ID: 890-3416-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 8021B - Volatile Organic Compounds (GC)

Lab Sample ID: MB 880-39063/5-A

Matrix: Solid Analysis Batch: 39062 Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 39063

	MB	MB						
Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Toluene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Ethylbenzene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
m-Xylene & p-Xylene	<0.00400	U	0.00400	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
o-Xylene	<0.00200	U	0.00200	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
Xylenes, Total	< 0.00400	U	0.00400	mg/Kg		11/09/22 08:53	11/09/22 11:32	1
I and the second								

MB MB

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	78		70 - 130	11/09/22 08:53	11/09/22 11:32	1
1,4-Difluorobenzene (Surr)	100		70 - 130	11/09/22 08:53	11/09/22 11:32	1

Lab Sample ID: LCS 880-39063/1-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 39062

Prep Type: Total/NA

Prep Batch: 39063

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	0.100	0.1065		mg/Kg		107	70 - 130	
Toluene	0.100	0.09243		mg/Kg		92	70 - 130	
Ethylbenzene	0.100	0.08737		mg/Kg		87	70 - 130	
m-Xylene & p-Xylene	0.200	0.1791		mg/Kg		90	70 - 130	
o-Xylene	0.100	0.08740		mg/Kg		87	70 - 130	

LCS LCS

Surrogate	%Recovery	Qualifier	Limits
4-Bromofluorobenzene (Surr)	92		70 - 130
1,4-Difluorobenzene (Surr)	113		70 - 130

Lab Sample ID: LCSD 880-39063/2-A

Matrix: Solid

Analysis Batch: 39062

Prep Type: Total/NA Prep Batch: 39063

RPD LCSD LCSD Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Limit Benzene 0.100 0.1066 mg/Kg 107 70 - 130 0 35 Toluene 0.100 0.08974 mg/Kg 90 70 - 130 3 35 Ethylbenzene 0.100 0.08748 mg/Kg 87 70 - 130 0 35 0.200 0.1783 m-Xylene & p-Xylene mg/Kg 89 70 - 130 35 0.100 0.08857 70 - 130 o-Xylene mg/Kg 35

LCSD LCSD

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

Lab Sample ID: 880-21259-A-1-I MS

Matrix: Solid

Analysis Batch: 39062

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

Prep Batch: 39063

	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Benzene	<0.00200	U F1 F2	0.0998	0.09660		mg/Kg		97	70 - 130	
Toluene	<0.00200	U	0.0998	0.08183		mg/Kg		81	70 - 130	

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QC Sample Results

Job ID: 890-3416-1 Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

Lab Sample ID: 880-21259-A-1-I MS Client Sample ID: Matrix Spike Prep Type: Total/NA

Matrix: Solid Analysis Batch: 39062

Sample Sample Spike MS MS %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits D <0.00200 U 0.0998 0.07769 78 70 - 130 Ethylbenzene mg/Kg m-Xylene & p-Xylene <0.00401 U 0.200 0.1573 mg/Kg 79 70 - 130 <0.00200 U 0.0998 77 70 - 130 o-Xylene 0.07732 mg/Kg

MS MS

Surrogate Qualifier Limits %Recovery 70 - 130 4-Bromofluorobenzene (Surr) 90 1,4-Difluorobenzene (Surr) 70 - 130 114

Lab Sample ID: 880-21259-A-1-J MSD Client Sample ID: Matrix Spike Duplicate

Matrix: Solid

Analysis Batch: 39062

Prep Type: Total/NA

Prep Batch: 39063

Prep Batch: 39063

Sample Sample Spike MSD MSD RPD Result Qualifier %Rec RPD Limit babbA Result Qualifier Limits Analyte Unit Benzene <0.00200 U F1 F2 0.0996 0.06729 F1 F2 mg/Kg 68 70 - 130 36 35 Toluene <0.00200 0.0996 0.07180 mg/Kg 71 70 - 130 13 35 <0.00200 0.0996 0.08519 86 70 - 130 9 35 Ethylbenzene U mg/Kg m-Xylene & p-Xylene < 0.00401 U 0.199 0.1658 mg/Kg 83 70 - 130 5 35 0.0996 82 70 - 130 o-Xylene <0.00200 U 0.08146 mg/Kg 5 35

MSD MSD

Qualifier Limits Surrogate %Recovery 4-Bromofluorobenzene (Surr) 104 70 - 130 1,4-Difluorobenzene (Surr) 98 70 - 130

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

Lab Sample ID: MB 880-39116/1-A

Matrix: Solid

Analysis Batch: 39056

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

Prep Batch: 39116

мв мв Result Qualifier RL Unit D Prepared Dil Fac Analyte Analyzed <50.0 U 50.0 11/09/22 14:01 11/09/22 20:15 Gasoline Range Organics mg/Kg (GRO)-C6-C10 11/09/22 20:15 Diesel Range Organics (Over <50.0 U 50.0 11/09/22 14:01 mg/Kg C10-C28) OII Range Organics (Over C28-C36) <50.0 U 50.0 mg/Kg 11/09/22 14:01 11/09/22 20:15

MB MB

%Recovery Qualifier Limits Prepared Dil Fac Surrogate Analyzed 1-Chlorooctane 95 70 - 130 11/09/22 14:01 11/09/22 20:15 96 70 - 130 11/09/22 14:01 11/09/22 20:15 o-Terphenyl

Lab Sample ID: LCS 880-39116/2-A

Matrix: Solid

Analysis Batch: 39056

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

Prep Batch: 39116

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Gasoline Range Organics	1000	814.3		mg/Kg		81	70 - 130	
(GRO)-C6-C10								
Diesel Range Organics (Over	1000	939.9		mg/Kg		94	70 - 130	
C10-C28)								

Job ID: 890-3416-1 Client: Ensolum Project/Site: ADU 624/641 SDG: 03E1558026/03E1558062

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

LCS LCS

%Recovery Qualifier

100

104

Lab Sample ID: LCS 880-39116/2-A **Client Sample ID: Lab Control Sample**

Matrix: Solid

Analysis Batch: 39056

Surrogate

o-Terphenyl

1-Chlorooctane

Prep Type: Total/NA

Prep Batch: 39116

Lab Sample ID: LCSD 880-39116/3-A Client Sample ID: Lab Control Sample Dup

Limits

70 - 130

70 - 130

Matrix: Solid

Analysis Batch: 39056

Prep Type: Total/NA

Prep Batch: 39116

Spike LCSD LCSD %Rec RPD Analyte Added Result Qualifier Unit D %Rec Limits **RPD** Limit 1000 870.1 87 70 - 13020 Gasoline Range Organics mg/Kg 7 (GRO)-C6-C10 Diesel Range Organics (Over 1000 926.4 93 mg/Kg 70 - 13020 C10-C28)

LCSD LCSD

Surrogate %Recovery Qualifier Limits 99 70 - 130 1-Chlorooctane 103 70 - 130 o-Terphenyl

Lab Sample ID: 890-3418-A-1-I MS Client Sample ID: Matrix Spike

Matrix: Solid

Analysis Batch: 39056

Prep Type: Total/NA

Prep Batch: 39116

Sample Sample MS MS Spike Added Analyte Result Qualifier Result Qualifier Unit D %Rec Limits Gasoline Range Organics <50.0 U F2 997 763.6 mg/Kg 77 70 - 130 (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 997 807.0 mg/Kg 81 70 - 130 C10-C28)

MS MS %Recovery Qualifier Surrogate Limits 70 - 130 1-Chlorooctane 74 o-Terphenyl 80 70 - 130

Lab Sample ID: 890-3418-A-1-J MSD Client Sample ID: Matrix Spike Duplicate

Analysis Batch: 39056

Matrix: Solid

Prep Type: Total/NA

Prep Batch: 39116

Sample Sample MSD MSD RPD Spike %Rec Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits **RPD** Limit U F2 999 963.3 F2 Gasoline Range Organics <50.0 96 70 - 130 23 20 mg/Kg (GRO)-C6-C10 Diesel Range Organics (Over <50.0 U 999 803.3 mg/Kg 80 70 - 130 20

C10-C28)

MSD MSD

%Recovery Qualifier Surrogate Limits 1-Chlorooctane 86 70 - 130 78 70 - 130 o-Terphenyl

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: 890-3416-1 SDG: 03E1558026/03E1558062 Project/Site: ADU 624/641

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 880-39114/1-A

Matrix: Solid

Analysis Batch: 39143

MB MB

Dil Fac Analyte Result Qualifier RL Unit D Prepared Analyzed Chloride <5.00 U 5.00 mg/Kg 11/10/22 13:25

Lab Sample ID: LCS 880-39114/2-A

Matrix: Solid

Analysis Batch: 39143

Spike LCS LCS %Rec Added Analyte Result Qualifier Unit D %Rec Limits Chloride 250 264.0 mg/Kg 106 90 - 110

Lab Sample ID: LCSD 880-39114/3-A

Matrix: Solid

Analysis Batch: 39143

LCSD LCSD %Rec RPD Spike Analyte Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 250 250.7 mg/Kg 100 90 - 110

Lab Sample ID: 880-21350-A-11-B MS

Matrix: Solid

Analysis Batch: 39143

MS MS Sample Sample Spike %Rec Analyte Result Qualifier Added Qualifier %Rec Result Unit Limits Chloride 81.5 249 335.6 102 90 - 110 mg/Kg

Lab Sample ID: 880-21350-A-11-C MSD

Matrix: Solid

Analysis Batch: 39143

Sample Sample Spike MSD MSD %Rec RPD Analyte Result Qualifier Added Result Qualifier Unit %Rec Limits RPD Limit Chloride 249 81.5 332.1 mg/Kg 101 90 - 110 20

QC Association Summary

 Client: Ensolum
 Job ID: 890-3416-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC VOA

Analysis Batch: 39062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	8021B	39063
890-3416-2	FS13	Total/NA	Solid	8021B	39063
890-3416-3	FS14	Total/NA	Solid	8021B	39063
MB 880-39063/5-A	Method Blank	Total/NA	Solid	8021B	39063
LCS 880-39063/1-A	Lab Control Sample	Total/NA	Solid	8021B	39063
LCSD 880-39063/2-A	Lab Control Sample Dup	Total/NA	Solid	8021B	39063
880-21259-A-1-I MS	Matrix Spike	Total/NA	Solid	8021B	39063
880-21259-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8021B	39063

Prep Batch: 39063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	5035	 :
890-3416-2	FS13	Total/NA	Solid	5035	
890-3416-3	FS14	Total/NA	Solid	5035	
MB 880-39063/5-A	Method Blank	Total/NA	Solid	5035	
LCS 880-39063/1-A	Lab Control Sample	Total/NA	Solid	5035	
LCSD 880-39063/2-A	Lab Control Sample Dup	Total/NA	Solid	5035	
880-21259-A-1-I MS	Matrix Spike	Total/NA	Solid	5035	
880-21259-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	5035	

Analysis Batch: 39233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	Total BTEX	
890-3416-2	FS13	Total/NA	Solid	Total BTEX	
890-3416-3	FS14	Total/NA	Solid	Total BTEX	

GC Semi VOA

Analysis Batch: 39056

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	8015B NM	39116
890-3416-2	FS13	Total/NA	Solid	8015B NM	39116
890-3416-3	FS14	Total/NA	Solid	8015B NM	39116
MB 880-39116/1-A	Method Blank	Total/NA	Solid	8015B NM	39116
LCS 880-39116/2-A	Lab Control Sample	Total/NA	Solid	8015B NM	39116
LCSD 880-39116/3-A	Lab Control Sample Dup	Total/NA	Solid	8015B NM	39116
890-3418-A-1-I MS	Matrix Spike	Total/NA	Solid	8015B NM	39116
890-3418-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015B NM	39116

Prep Batch: 39116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	8015NM Prep	
890-3416-2	FS13	Total/NA	Solid	8015NM Prep	
890-3416-3	FS14	Total/NA	Solid	8015NM Prep	
MB 880-39116/1-A	Method Blank	Total/NA	Solid	8015NM Prep	
LCS 880-39116/2-A	Lab Control Sample	Total/NA	Solid	8015NM Prep	
LCSD 880-39116/3-A	Lab Control Sample Dup	Total/NA	Solid	8015NM Prep	
890-3418-A-1-I MS	Matrix Spike	Total/NA	Solid	8015NM Prep	
890-3418-A-1-J MSD	Matrix Spike Duplicate	Total/NA	Solid	8015NM Prep	

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QC Association Summary

 Client: Ensolum
 Job ID: 890-3416-1

 Project/Site: ADU 624/641
 SDG: 03E1558026/03E1558062

GC Semi VOA

Analysis Batch: 39201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Total/NA	Solid	8015 NM	
890-3416-2	FS13	Total/NA	Solid	8015 NM	
890-3416-3	FS14	Total/NA	Solid	8015 NM	
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Leach Batch: 39114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Soluble	Solid	DI Leach	
890-3416-2	FS13	Soluble	Solid	DI Leach	
890-3416-3	FS14	Soluble	Solid	DI Leach	
MB 880-39114/1-A	Method Blank	Soluble	Solid	DI Leach	
LCS 880-39114/2-A	Lab Control Sample	Soluble	Solid	DI Leach	
LCSD 880-39114/3-A	Lab Control Sample Dup	Soluble	Solid	DI Leach	
880-21350-A-11-B MS	Matrix Spike	Soluble	Solid	DI Leach	
880-21350-A-11-C MSD	Matrix Spike Duplicate	Soluble	Solid	DI Leach	

Analysis Batch: 39143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
890-3416-1	FS12	Soluble	Solid	300.0	39114
890-3416-2	FS13	Soluble	Solid	300.0	39114
890-3416-3	FS14	Soluble	Solid	300.0	39114
MB 880-39114/1-A	Method Blank	Soluble	Solid	300.0	39114
LCS 880-39114/2-A	Lab Control Sample	Soluble	Solid	300.0	39114
LCSD 880-39114/3-A	Lab Control Sample Dup	Soluble	Solid	300.0	39114
880-21350-A-11-B MS	Matrix Spike	Soluble	Solid	300.0	39114
880-21350-A-11-C MSD	Matrix Snike Dunlicate	Soluble	Solid	300.0	39114

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Client: Ensolum

Job ID: 890-3416-1

SDG: 03E1558026/03E1558062

Client Sample ID: FS12

Project/Site: ADU 624/641

Lab Sample ID: 890-3416-1

Date Collected: 11/08/22 09:10 Date Received: 11/08/22 11:46

•	Matrix: Solid	

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Туре	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.03 g	5 mL	39063	11/09/22 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39062	11/09/22 18:58	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39233	11/10/22 11:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			39201	11/10/22 09:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.02 g	10 mL	39116	11/09/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39056	11/10/22 02:25	AJ	EET MID
Soluble	Leach	DI Leach			5.02 g	50 mL	39114	11/09/22 13:31	KS	EET MID
Soluble	Analysis	300.0		5			39143	11/10/22 16:14	CH	EET MID

Client Sample ID: FS13 Lab Sample ID: 890-3416-2

Date Collected: 11/08/22 09:15 Matrix: Solid

Date Received: 11/08/22 11:46

	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	39063	11/09/22 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39062	11/09/22 19:19	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39233	11/10/22 11:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			39201	11/10/22 09:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.01 g	10 mL	39116	11/09/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39056	11/10/22 02:47	AJ	EET MID
Soluble	Leach	DI Leach			5.01 g	50 mL	39114	11/09/22 13:31	KS	EET MID
Soluble	Analysis	300.0		1			39143	11/10/22 16:20	CH	EET MID

Client Sample ID: FS14 Lab Sample ID: 890-3416-3

Date Collected: 11/08/22 09:30 Date Received: 11/08/22 11:46

	Batch	Batch		Dil	Initial	Final	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Amount	Amount	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	5035			5.02 g	5 mL	39063	11/09/22 13:00	MNR	EET MID
Total/NA	Analysis	8021B		1	5 mL	5 mL	39062	11/09/22 19:39	MNR	EET MID
Total/NA	Analysis	Total BTEX		1			39233	11/10/22 11:59	SM	EET MID
Total/NA	Analysis	8015 NM		1			39201	11/10/22 09:40	SM	EET MID
Total/NA	Prep	8015NM Prep			10.00 g	10 mL	39116	11/09/22 14:01	DM	EET MID
Total/NA	Analysis	8015B NM		1	1 uL	1 uL	39056	11/10/22 03:08	AJ	EET MID
Soluble	Leach	DI Leach			5.05 g	50 mL	39114	11/09/22 13:31	KS	EET MID
Soluble	Analysis	300.0		5			39143	11/10/22 16:27	CH	EET MID

Laboratory References:

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

Eurofins Carlsbad

Matrix: Solid

Accreditation/Certification Summary

Client: Ensolum Job ID: 890-3416-1 Project/Site: ADU 624/641

SDG: 03E1558026/03E1558062

Laboratory: Eurofins Midland

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

Authority	Pr	ogram	Identification Number	Expiration Date	
Texas	NE	ELAP	T104704400-22-24	06-30-23	
The following analytes	are included in this report, but	it the laboratory is not certifi	ed by the governing authority. This list ma	av include analytes for	
the agency does not of			ed by the governing additionty. This list his	ay include analytes loi	
the agency does not of Analysis Method		Matrix	Analyte	ay include analytes for	
0 ,	fer certification.	•	, , ,	ay include analytes loi	

Method Summary

Client: Ensolum Project/Site: ADU 624/641

Job ID: 890-3416-1

SDG: 03E1558026/03E1558062

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

Client Sample ID

FS12

FS13

FS14

Sample Summary

Matrix

Solid

Solid

Solid

Collected

11/08/22 09:10

11/08/22 09:15

11/08/22 09:30

Client: Ensolum

Lab Sample ID

890-3416-1

890-3416-2

890-3416-3

Project/Site: ADU 624/641

Job ID: 890-3416-1

SDG: 03E1558026/03E1558062

Received	Depth
11/08/22 11:46	12'

11/08/22 11:46 9' 11/08/22 11:46 7.5'

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

Total 200.7 / 6010

200.8 / 6020:

8RCRA

TCLP / SPLP 6010: 8RCRA Sb As Ba Be Cd Cr Co Cu Pb

13PPM Texas 11 Al Sb As Ba Be B

S C

Ca Cr Co

Cu Fe Pb Mg Mn Mo Ni K

Se

Ag SiO₂ Na Sr Tl Sn U V Zn Hg: 1631/245.1/7470/7471

AFE:

Incident ID:

Sample Comments

Cost Center:

1136151001 / 1136141001

NAPP2123634554 / NAPP2215449179

Mn

Mo Ni Se Ag TI U

2

3

4

5

7

10

12

13

eurofins

Environment Testing

Xenco

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) 888-3199

Work Order No:

-	-3416 Chain of Custody					_			ANALYSIS REQUEST	Deli	Rep	Stat	Prog		988-3199
-									7	Deliverables: EDD	Reporting: Level III Level III PST/UST TRRP	State of Project:	Program: UST/PST ☐ PRP☐ Brownfields ☐ RRC ☐ Superfund [Work Ord	www.xenco.com
NaOH+Ascorbic Acid: SAPC	Zn Acetate+NaOH: Zn	Na ₂ S ₂ O ₃ : NaSO ₃	NaHSO ₄ : NABIS	H₃PO₄: HP	H ₂ S0 ₄ : H ₂	HCL: HC	Cool: Cool	None: NO	Preserva	ADaPT Other	PST/UST TRRF		rownfields [] RRC	Work Order Comments	com Page
ic Acid: SAPC	OH: Zn	0,	S		NaOH: Na	HNO3: HN	MeOH: Me	DI Water: H ₂ O	Preservative Codes		Level IV		☐ Superfund ☐		of

Phone:

3122 National Parks Hwy Carlsbad, NM 88220 303-887-2946

Email: Garrett.Green@ExxonMobil.com

City, State ZIP:

Bill to: (if different)
Company Name:

Garrett Green

XTO Energy

3104 E. Green St.

Carlsbad, NM 88220

ity, State ZIP:

ddress:

Project Manager:
Company Name:

Kalei Jennings Ensolum

Project Number

03E1558026 & 03E1558062

ADU 624 / 641

Project Name:

Sampler's Name:

Connor Whitman

Due Date:

2 Day

Routine

√ Rush

Code

Turn Around

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

roject Location:

SAMPLE RECEIPT

Temp Blank:

Mes No

Wet Ice:

(1)

Parameters

No

Thermometer ID:

Samples Received Intact:

ooler Custody Seals:

Yes

Temperature Reading:
Corrected Temperature

0

0

CHLORIDES (EPA: 300.0)

890

Yes

S S

NA

ample Custody Seals:

otal Containers

Sample Identification

Matrix

Sampled

Sampled

Date

Time

Depth

of

TPH (8015)

BTEX (8021)

12

Comp Comp

FS12 FS13

FS14

SSS

11/8/2022 11/8/2022 11/8/2022

9:30

7.5

9:10 9:15

ω

Comp

×

×

Revised Date: 08/25/2020 Rev. 2020.2	Z.D				
		6			5
		4.		0	ω
		2	HII CC/8/111-	1111 CC/8/11- 40 XX & D. B. 111	さんなか
Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)
	tandard terms and conditions rumstances beyond the control rced unless previously negotiated.	 ts affiliates and subcontractors. It assigns surred by the client if such losses are due to circulate the contract of the contrac	ent company to Eurofins Xenco for any losses or expenses incu ample submitted to Eurofins Xe	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.	Notice: Signature of this document and relinc of service. Eurofins Xenco will be liable only of Eurofins Xenco. A minimum charge of \$85

Login Sample Receipt Checklist

 Client: Ensolum
 Job Number: 890-3416-1

 SDG Number: 03E1558026/03E1558062

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

1

3

4

6

8

4 4

12

77

14

<6mm (1/4").

Login Sample Receipt Checklist

Client: Ensolum Job Number: 890-3416-1

SDG Number: 03E1558026/03E1558062

List Source: Eurofins Midland List Creation: 11/09/22 10:47 AM

List Number: 2 Creator: Rodriguez, Leticia

Login Number: 3416

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

Released to Imaging: 2/15/2023 1:40:53 PM

<6mm (1/4").



APPENDIX D

NMOCD Notifications

From: Hamlet, Robert, EMNRD

To: Foust, Bryan Jacob

Cc: DelawareSpills /SM; Kalei Jennings; Tacoma Morrissey; Green, Garrett J; Bratcher, Michael, EMNRD; Nobui,

Jennifer, EMNRD; Harimon, Jocelyn, EMNRD

Subject: (Extension Approval) - XTO- Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

Date: Tuesday, October 18, 2022 8:18:21 AM

[**EXTERNAL EMAIL**]

RE: Incident #NAPP2123634554

Bryan,

Your request for an extension to **November 17th, 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
506 W. Texas Ave.| Artesia, NM 88210
575.909.0302 | robert.hamlet@state.nm.us

http://www.emnrd.state.nm.us/OCD/



From: Foust, Bryan Jacob bryan.foust@exxonmobil.com

Sent: Monday, October 17, 2022 3:47 PM

To: Bratcher, Michael, EMNRD <mike.bratcher@emnrd.nm.gov>; Enviro, OCD, EMNRD <OCD.Enviro@emnrd.nm.gov>; Hamlet, Robert, EMNRD <Robert.Hamlet@emnrd.nm.gov>

Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Kalei Jennings

<kjennings@ensolum.com>; Tacoma Morrissey <tmorrissey@ensolum.com>; Green, Garrett J
<garrett.green@exxonmobil.com>

Subject: [EXTERNAL] XTO- Extension Update- Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

All,

Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

XTO is providing an update on the remediation work plan for the Avalon Delaware Unit 624 (Incident

Number NAPP2123634554). The remediation work plan was approved by NMOCD on July 20, 2022, which included a proposed deadline of October 18, 2022. XTO has completed excavation of impacted soil per the approved work plan; however, during excavation activities, XTO encountered what appears to be historical impacts that requires additional investigation. The excavation required support of an exposed pipeline that was meant as a short-term solution for excavation. In order to delineate and plan for potential longer term soil removal around the pipeline, XTO requests a 30-day extension of the approved remediation work plan deadline until November 17, 2022. During that time, XTO will investigate potential historical impacts and either remove them by the deadline or submit a revised work plan to address a larger volume of soil.

Thank you,

Jake Foust SSHE Coordinator (environmental) 432-266-2663

Collins, Melanie

From: Collins, Melanie

Sent: Friday, January 7, 2022 12:35 PM

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us

Cc: DelawareSpills /SM; Cole, Aimee; Ager, Ashley; Jennings, Kalei

Subject: XTO Extension Request: Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

All,

Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

XTO is requesting an extension to the 90-day deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Avalon Delaware Unit 624 (Incident Number NAPP2123634554). The release was discovered August 10, 2021 and an initial site assessment was conducted. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) on October 7, 2021. The executed permit is still pending. XTO will begin remediation activities as soon as the executed permit is received. In order to conduct further site assessment, complete the remediation work, and submit a remediation work plan or closure report XTO requests an extension of this deadline until May 7, 2022.

Thank you,

Melanie Collins

SSHE Technician

432-218-3709

An ExxonMobil Subsidiary 6401 Holiday Hill Rd, Bldg 5 Midland, TX 79707

Collins, Melanie

From: Collins, Melanie

Sent: Tuesday, April 26, 2022 4:29 PM

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us
Cc: DelawareSpills /SM; Tacoma Morrissey; Kalei Jennings

Subject: XTO- Extension Request - Avalon Delaware Unit 624 (Incident Number

NAPP2123634554)

All,

Avalon Delaware Unit 624 (Incident Number NAPP2123634554)

XTO is requesting an extension for the current deadline of May 7, 2022 for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Avalon Delaware Unit 624 (Incident Number NAPP2123634554). The release was discovered on August 10, 2021 and initial site assessment was conducted. Fluids were released into a pasture area due to a corroded flowline. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) in October 2021. The executed ROE permit was received January 18, 2022. The most recent field screening results indicate that additional delineation and remediation activities are required. In order to complete additional remediation activities and submit a remediation work plan or closure report, XTO requests a 90-day extension of this deadline until August 5, 2022.

Thank you,

Melanie Collins

SSHE Technician

An ExxonMobil Subsidiary 6401 Holiday Hill Rd, Bldg 5 Midland, TX 79707 432-218-3709

Collins, Melanie

From: Collins, Melanie

Sent: Friday, October 29, 2021 12:39 PM

To: ocd.enviro@state.nm.us; mike.bratcher@state.nm.us

Cc: DelawareSpills /SM; Cole, Aimee; Ager, Ashley; Jennings, Kalei

Subject: XTO-Extension Request - Avalon Delaware Unit 624 (Incident Number

NAPP2123634554)

All,

XTO is requesting an extension to the 90-day deadline for submitting a remediation work plan or closure report required in 19.15.29.12.B.(1) NMAC at the Avalon Delaware Unit 624 (Incident Number NAPP2123634554). The release was discovered August 10, 2021 and an initial site assessment was conducted. A Right of Entry (ROE) Permit was submitted to the State Land Office (SLO) on October 7, 2021. The executed permit is still pending. XTO will begin remediation activities as soon as the executed permit is received. In order to conduct further site assessment, complete the remediation work, and submit a remediation work plan or closure report XTO requests an extension of this deadline until February 6, 2022.

Thank you,

Melanie Collins

SSHE Technician

TO

An **ExxonMobil** Subsidiary 6401 Holiday Hill Rd, Bldg 5 Midland, TX 79707 432-218-3709 From: Collins, Melanie
To: DelawareSpills /SM

Cc: Ashley Ager; Tacoma Morrissey; Kalei Jennings; Ben Belill; Pennington, Shelby G

Subject: FW: The Oil Conservation Division (OCD) has approved the application, Application ID: 104853

Date: Wednesday, July 20, 2022 3:39:34 PM

[**EXTERNAL EMAIL**]

Work plan conditionally approved for ADU 624, released 8/10/21. Work plan submitted 5/6/22.

From: OCDOnline@state.nm.us [mailto:OCDOnline@state.nm.us]

Sent: Wednesday, July 20, 2022 3:19 PM

To: Collins, Melanie <melanie.collins@exxonmobil.com>

Subject: The Oil Conservation Division (OCD) has approved the application, Application ID: 104853

External Email - Think Before You Click

To whom it may concern (c/o Melanie Collins for XTO ENERGY, INC),

The OCD has approved the submitted *Application for administrative approval of a release notification and corrective action* (C-141), for incident ID (n#) nAPP2123634554, with the following conditions:

• The Remediation Plan is conditionally approved: The release will need to be remediated to the strictest closure criteria standards due to high karst potential. Please collect confirmation samples, representing no more than 200 ft2. The liner installation is only approved at 4 feet bgs if all floor samples show TPH less than 100 mg/kg. Floor samples must be excavated to the strictest closure criteria, backfilled to 4 feet bgs with clean material, and then the liner installed. Samples must be analyzed for all constituents listed in Table I of 19.15.29.12 NMAC. Sidewall samples should be delineated/excavated to 600 mg/kg for chlorides and 100 mg/kg for TPH to define the edge of the release. The work will need to occur in 90 days after the work plan has been approved.

The signed C-141 can be found in the OCD Online: Imaging under the incident ID (n#).

If you have any questions regarding this application, please contact me.

Thank you, Robert Hamlet 575-748-1283 Robert.Hamlet@state.nm.us

New Mexico Energy, Minerals and Natural Resources Department 1220 South St. Francis Drive Santa Fe, NM 87505 From: <u>Aimee Cole</u>
To: <u>Kalei Jennings</u>

Subject: FW: XTO Site Activities for the week of April 21st

Date: Monday, May 2, 2022 12:23:08 PM

Attachments: image001.png

image002.png image003.png image004.png



Aimee Cole

Senior Managing Scientist 720-384-7365

Ensolum, LLC

From: Green, Garrett J <garrett.green@exxonmobil.com>

Sent: Friday, April 29, 2022 10:00 AM

To: ocd.enviro@state.nm.us; Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Hamlet,

Robert, EMNRD <Robert.Hamlet@state.nm.us>; Nobui, Jennifer, EMNRD

<Jennifer.Nobui@state.nm.us>; Chad.Hensley@state.nm.us

Cc: DelawareSpills /SM <DelawareSpills@exxonmobil.com>; Baker, Adrian <adrian.baker@exxonmobil.com>; Aimee Cole <acole@ensolum.com>

Subject: XTO Site Activities for the week of April 21st

[**EXTERNAL EMAIL**]

All,

XTO plans to complete final sampling activities at the following sites the week of May 2, 2022.

Monday

- PLU 30 Big Sinks CTB / nAPP2206853301, nAPP2208351954, nAPP2209137379

Tuesday

PLU 30 Big Sinks CTB / nAPP2206853301, nAPP2208351954, nAPP2209137379

Wednesday

- ADU 624 / NAPP2123634554

Thursday

ADU 624 / NAPP2123634554

Friday

- ADU 624 / NAPP2123634554

Thank you,

Garrett Green

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

XTO Energy, Inc.

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

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

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

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

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

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

CONDITIONS

Action 159906

CONDITIONS

Operator:	OGRID:
XTO ENERGY, INC	5380
6401 Holiday Hill Road	Action Number:
Midland, TX 79707	159906
	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 #NAPP2123634554 AVALON DELAWARE UNIT 624, thank you. This closure is approved.	2/15/2023